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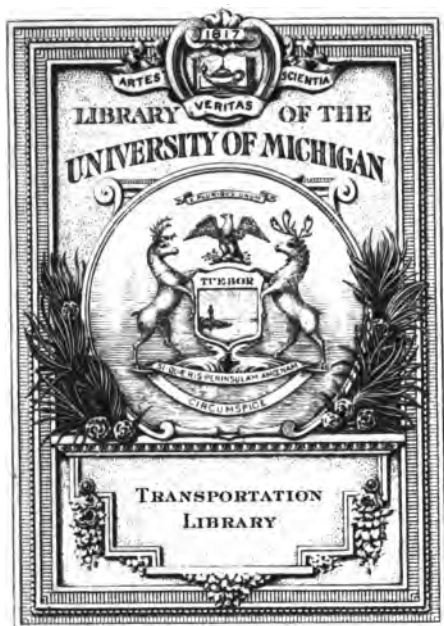
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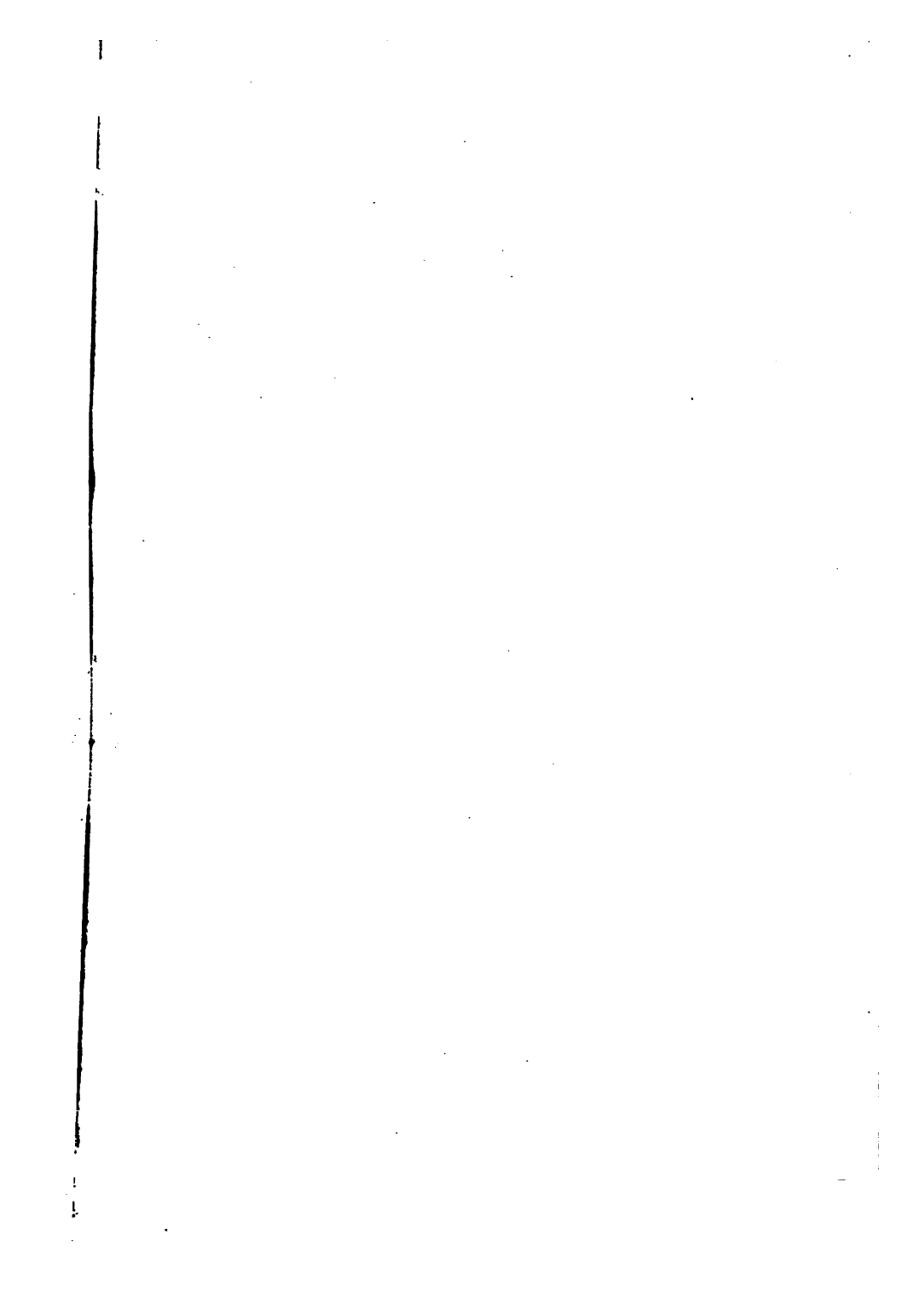
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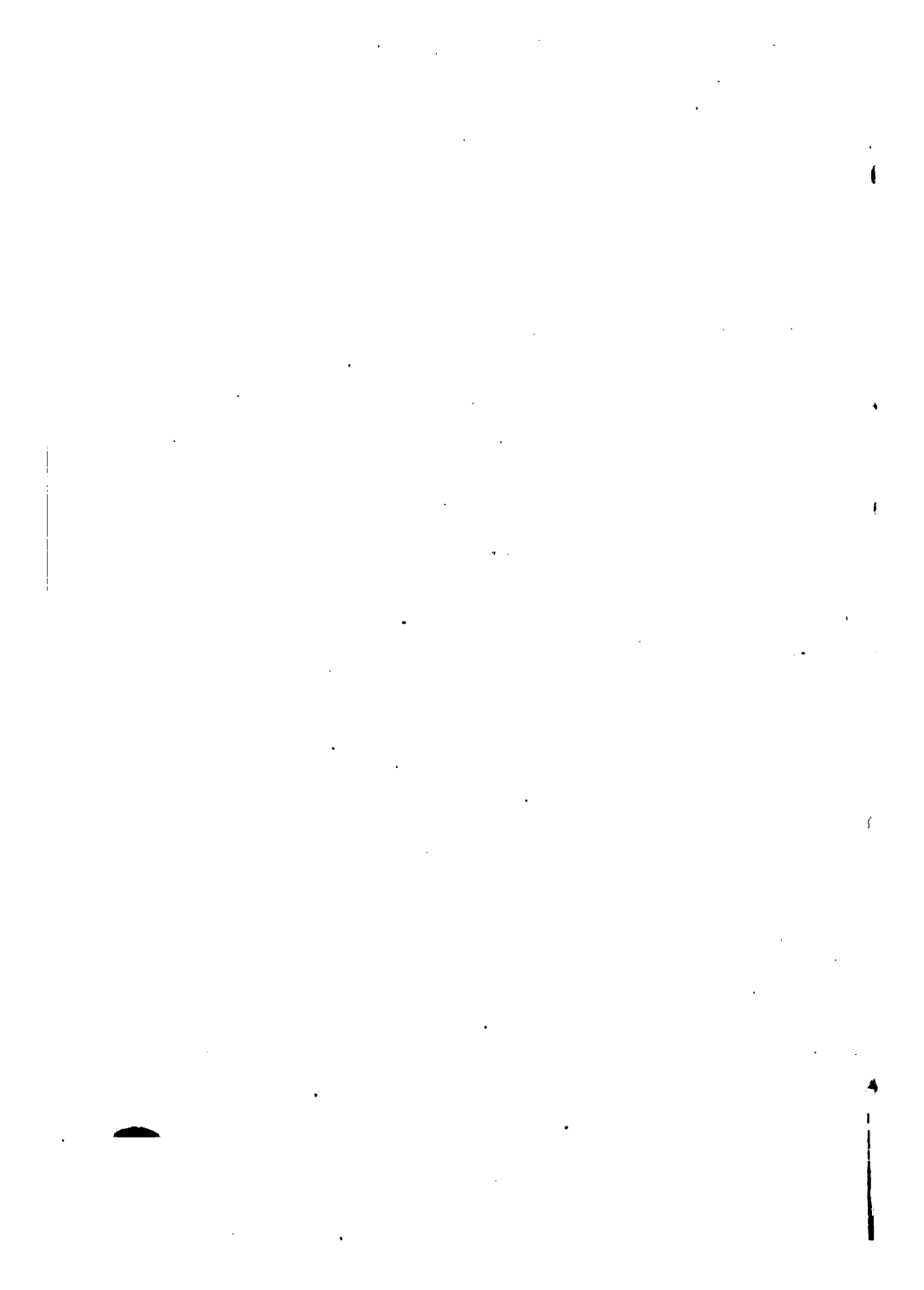
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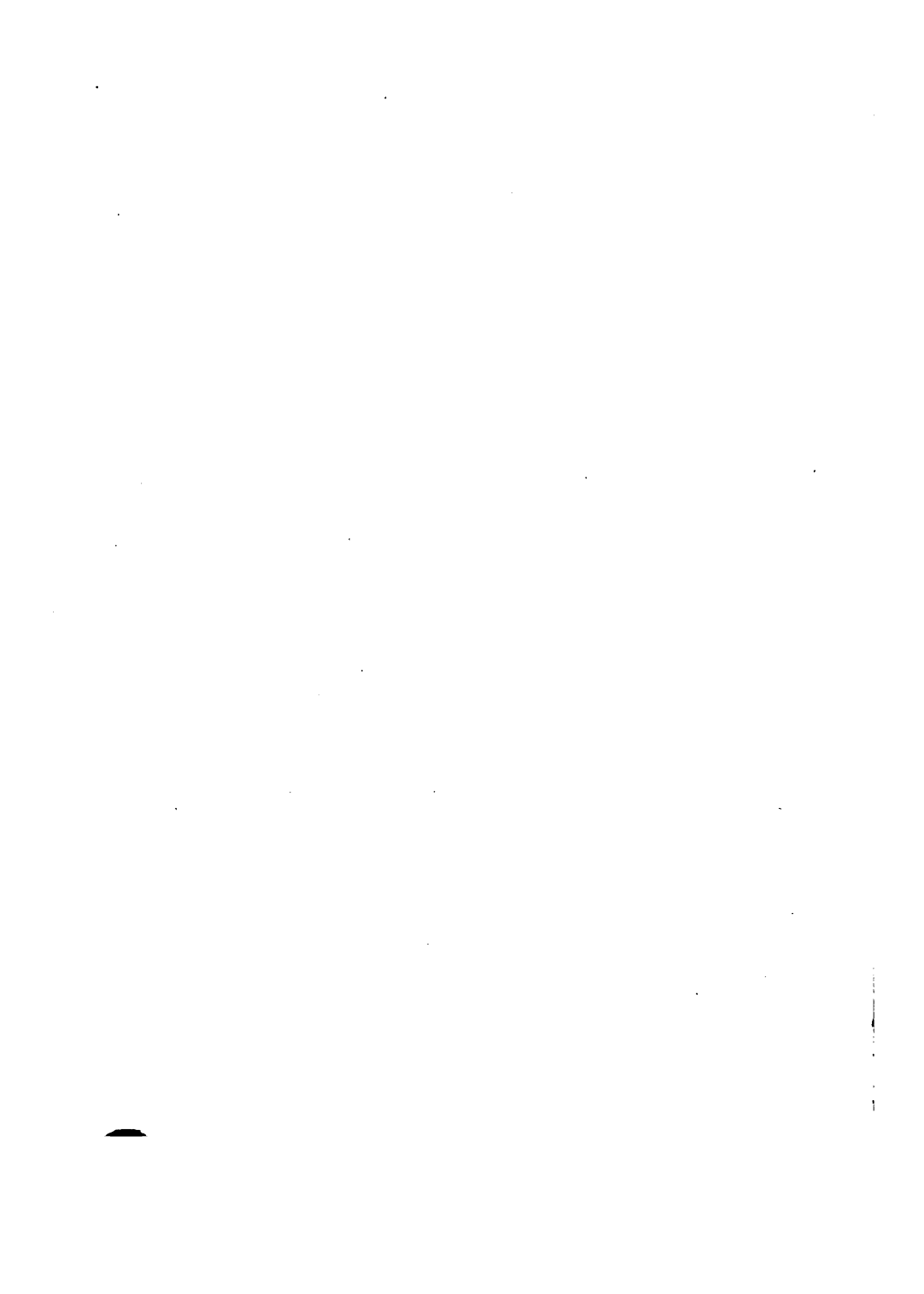
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Third and Revised Edition

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NEW YORK
1917

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EXPLANATORY NOTE

This volume, like the others of the series to which it belongs, has been compiled for the benefit of students and debaters, and for libraries wishing to supply good material in convenient form on the subject of government ownership. The present status of government regulation and government ownership of railroads in the United States and other countries, is briefly outlined in the Introduction and the General Discussion, while the Affirmative and Negative Discussions contain reprints of valuable material covering the arguments for and against the adoption of government ownership by the United States. The bibliography is a selected one, the references having been chosen so as to give the reader access to the most usable and most easily obtainable material. While some of the material included in the first and second editions of this handbook has been retained for this new edition, many of the articles and references are new, having been obtained from more recent sources. The brief and the introduction have been largely rewritten to meet present conditions. Students wishing to make a more extended study of the questions are recommended to consult the bibliographies listed elsewhere in this volume.

E. M. PHELPS.

November 23, 1916.

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BRIEF

RESOLVED, That the United States should own and operate its interstate railways.

INTRODUCTION

- I. The problem of transportation is a serious and important one.
 - A. It is vital in its relation to
 - 1. The needs of industry.
 - 2. The proper development of the country.
 - 3. The welfare of the individual.
 - B. Because of their size, control of resources, and number of people employed, railroads wield a powerful influence in public affairs which is dangerous unless properly controlled.
- II. Every nation has found it necessary to adopt some form of control over its railways.
 - A. The two forms of control in general use are:
 - 1. Private ownership and operation subject to government regulation.
 - 2. Government ownership and operation.
 - B. Control in the United States is effected by
 - 1. The Interstate Commerce Commission.
 - 2. The state commissions.
- III. It is generally admitted that this method of dual control has proven unsatisfactory.
 - A. It has failed to bring about the improvements and extensions in service necessary for the proper development of the country.
 - B. Railroads have been subjected to conflicting legislation and impossible demands by both federal and state commissions.
 - C. Railroads, shippers and the public unite in demanding relief.
- IV. To remedy the situation it is proposed that the federal government acquire and operate the interstate railways.

AFFIRMATIVE

The Affirmative is in favor of government ownership as the solution of our railroad problem, for

- ✓ I. Government ownership of our interstate railways would be a most effective remedy for the evils existing under our present system of control.
 - ✓ A. Rates could be lowered and adjusted with reference to the maximum development of all parts of the country.
 - 1. All temptation for secret rebates, discriminating tariffs, etc., would be removed.
 - a false conclusion* 2. The railroads could be conducted, like the postal service, as a public benefit rather than for profit.
 - 3. Rates could be adjusted to meet the needs of new industries, to develop new resources or unsettled parts of the country.
 - B. Wastes in management can be eliminated.
 - ✓ 1. By the consolidation of duplicating lines, offices and staffs.
 - ✓ 2. By reduction in the number of attorneys, commission men and traffic officials needed to protect the railroads in the courts, to influence legislation, and to secure new business.
 - ✓ C. Equipment and service could be improved and extended to fully meet the needs of the public.
 - 1. New lines could be built and service extended to properly develop all parts of the country.
 - ✓ 2. The demands of the public for greater safety and convenience in travel would be heeded.
 - ✓ 3. Earning capacity would no longer be the prime consideration.
 - ✓ D. There would be one system of regulation instead of the existing forty-nine systems.
 - 1. This would greatly reduce the amount of regulation to which railways are now subjected.
 - 2. Such regulation as persisted would be uniform and consistent.
 - ✓ E. Capital could readily be found for the development of new lines.

- ✓ F. Public life would be freed from the influence of the railroads in politics.
- II. Government ownership would be advisable for other reasons.
 - ✓ A. The conditions of railroad employees would be improved.
 - B. Public welfare would be largely increased.
 - 1. The present enormous inequalities in wealth existing in the United States would be largely reduced.
 - 2. Government ownership would tend to steady industrial development.
 - ✓ 3. Strikes would be largely eliminated.
 - 4. The benefits of travel would be brought within the reach of a greater number than at present.
 - C. In case of war the roads can quickly be mobilized for military purposes.
- III. Government ownership is practicable.
 - ✓ A. The railroad is properly a function of government.
 - 1. It can be operated under private ownership only by means of a franchise from the government.
 - B. The United States government has the power to purchase and operate railways.
 - 1. It has already done so, successfully, in the case of the Panama railway.
 - C. The purchase can easily be brought about.
 - 1. Such purchase will work no hardship to the owners of the railroad stocks and bonds.
 - 2. Government bonds can be issued to cover the existing stocks and bonds.
 - 3. The revenue will be sufficient to cover all expenses, improvements, interest on bonds and still provide a sinking fund for the retirement of the bonds.
 - 4. The value of the railroad properties will be greatly increased as a result of government ownership.
- IV. Government ownership has been successful where it has been tried.
 - A. It has succeeded in Prussia.
 - 1. Equipment and service have vastly improved, and passenger and freight traffic have more than doubled.

BRIEF

2. Fares and freights are steadily reduced and the railroads are a success financially.
3. The roads have responded to the needs of the country.
- B. In Switzerland.
 1. The conditions of the railway employees have greatly improved.
 2. Service has improved and rates are low and uniform to all.
 3. The statement that the Swiss railways are unsuccessful financially is untrue.
- C. In Australia and New Zealand.
 1. Australian railways show a lower percentage of operating expense, accidents, and cost of construction per mile than the United States, while its revenue per train-mile is higher.
 2. New Zealand railways have been conducted primarily to meet the needs of the country and not to make profits.
 - a. Fares are low.
 - b. Employees are well paid and well cared for.

NEGATIVE

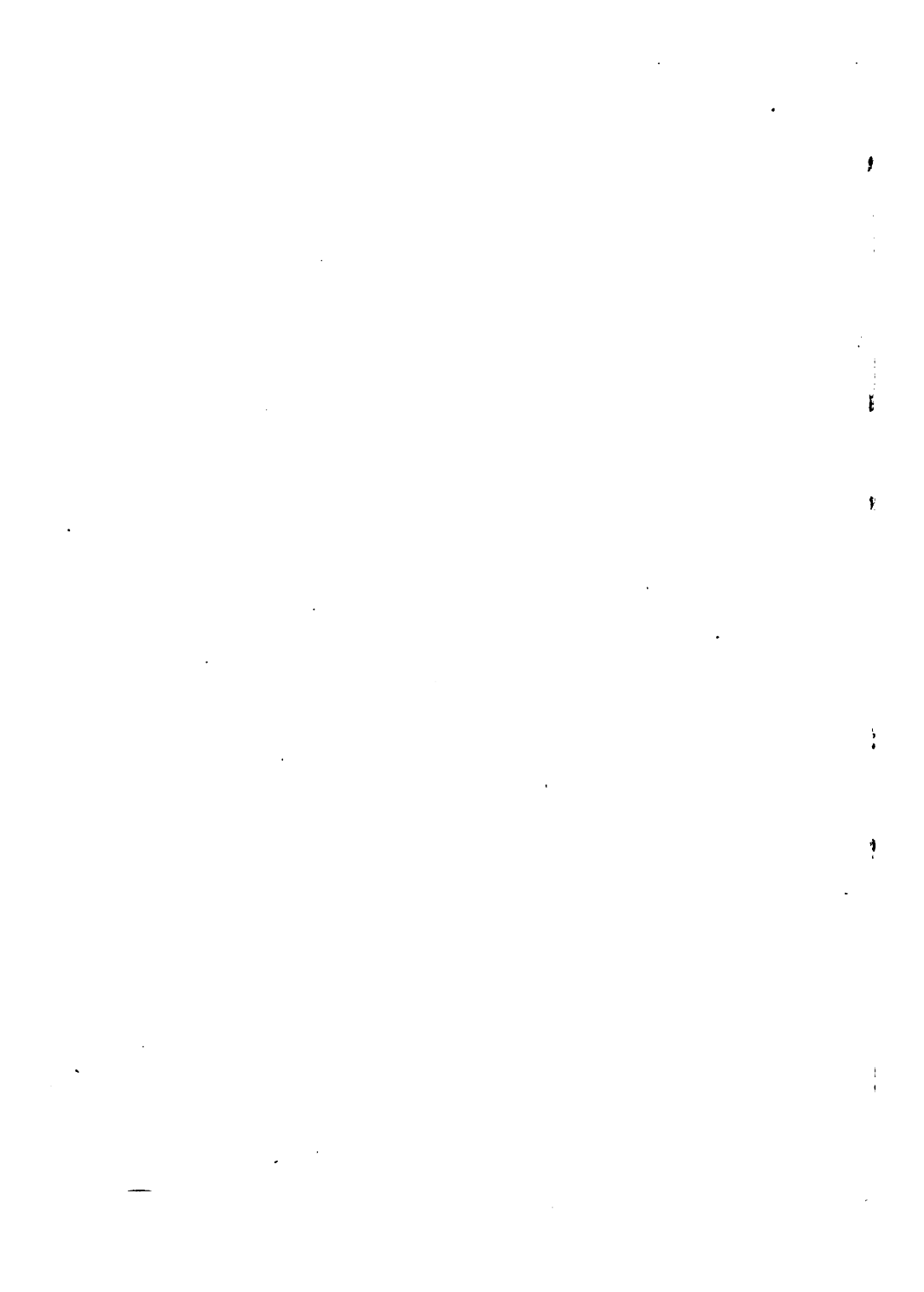
The Negative is not in favor of government ownership as a solution of our railroad problem, for

- I. It is not necessary under present conditions.
 - ✓ A. Our transportation facilities are already among the best in the world.
 1. Trains are run a greater number of miles annually in proportion to population, and at greater speed.
 2. Transportation is cheap.
 - a. Freight rates have steadily declined.
 - b. Passenger fares are low when compared with the quality of service furnished and the population served.
 3. The roads have responded generously to the needs of the country.
 - ✓ B. It is no longer true that the roads are overcapitalized.
 1. The original cash cost does not begin to cover the present value of the roads.

- ✓ C. Many of the former abuses of our railroad systems no longer exist.
 - 1. They originated under circumstances then well-nigh unavoidable.
 - 2. Time will cure most of the remaining evils.
 - 3. Railroad managers are cooperating with the government to remedy them.
 - ✓ D. That rates are unreasonable and discriminating is no longer true.
 - 1. Present rates are reasonable.
 - 2. Existing remedies are ample to prohibit unfair discrimination between individuals and localities.
 - 3. Some discrimination is necessary and reasonable.
 - a. In the classification of freight.
 - b. Between localities, in order to build up new industries and to develop natural resources.
 - E. Our system of railroad regulation could be improved without resorting to government ownership.
 - 1. Regulation of interstate railroads could be taken out of the hands of the states and given entirely to the federal government.
 - a. Legislation could be enacted to permit the railroads to take out federal charters.
 - b. The powers of the Interstate Commerce Commission could be strengthened to include control over the issuing of securities and so improve the credit of the roads and protect the stockholders.
- II. Government ownership would be unavoidable for other reasons.
- A. The government should not engage in industrial undertakings.
 - ✓ 1. Popular sovereignty is not fitted for such enterprises.
 - 2. Its present duties are already too numerous.
 - ✓ B. Administration of the roads would be inefficient and extravagant.
 - ✓ 1. Similar enterprises where undertaken by the government have not been administered economically.

- ✓ 2. The quality of the service and the equipment would be allowed to deteriorate.
 - 3. Our civil service is notoriously inefficient.
 - C. Government rate-making would be unsatisfactory.
 - 1. Discriminations would still exist.
 - a. Rebates and frauds can be brought about more easily under public than under private management.
 - 2. Rates would tend to rise rather than to decline.
 - ✓ a. Competition would be absent.
 - b. The roads would be compelled to raise wages, improve equipment and service, and at the same time, to make profits.
 - 3. Government rate-making would be too rigid.
 - a. It would tend to arrest commercial progress.
 - 4. Rate-making is too complex a matter to be left in hands of politicians.
 - a. The government could not pay the large salaries now paid to the trained railway officials, and consequently could not secure the best men.
 - D. Government management would not respond readily to the needs of industry.
 - 1. Legislation is always slow and liable to political influence.
 - 2. Populous and prosperous communities would receive facilities at the expense of newer and poorer communities.
 - 3. Claims against the government are difficult to collect.
 - ✓ E. Government ownership would be dangerous politically.
 - 1. An enormous army of employees would be at the disposal of the party in power.
 - F. The government is not a good employer of labor.
 - 1. It is arbitrary and unreliable.
 - 2. Wages would not keep pace with the cost of living.
- III. Government ownership would be unwise for fiscal reasons.
- A. The purchase of the roads alone presents difficulties well-nigh insurmountable.

1. The government would have to pay more than the roads were worth.
 2. The national debt would be increased beyond all reason.
 - a. The solvency of the government would be imperilled.
 3. There would be great opposition to the issue of bonds for such purchase.
 - B. The budget of the government would be thrown out of gear.
 1. The revenues and expenditures of the roads would be so much larger than the rest of the budget.
 2. A shrinkage in railroad receipts would cause financial embarrassment, and upset our taxing methods.
 - C. Bankrupt and unprofitable lines could not be reorganized but would remain a burden on the government.
- IV. Government ownership has only partially succeeded wherever it has been tried.
- A. It has failed in many respects in Prussia.
 1. Facilities and equipment are not as good as in the United States.
 2. Freight rates are higher.
 3. Facilities have not been afforded equally, and industry has been restricted.
 4. Conditions in Prussia are entirely different from those in the United States.
 - a. Conditions of population and traffic are different.
 - b. The government of Prussia is bureaucratic and administrative, while ours is legislative and parliamentary.
 - c. The civil service is efficient and the country is practically developed.
 - B. In Switzerland.
 1. After ten years the roads show a deficit.
 2. Conditions are unlike those in the United States.
 - C. In Australia and New Zealand.



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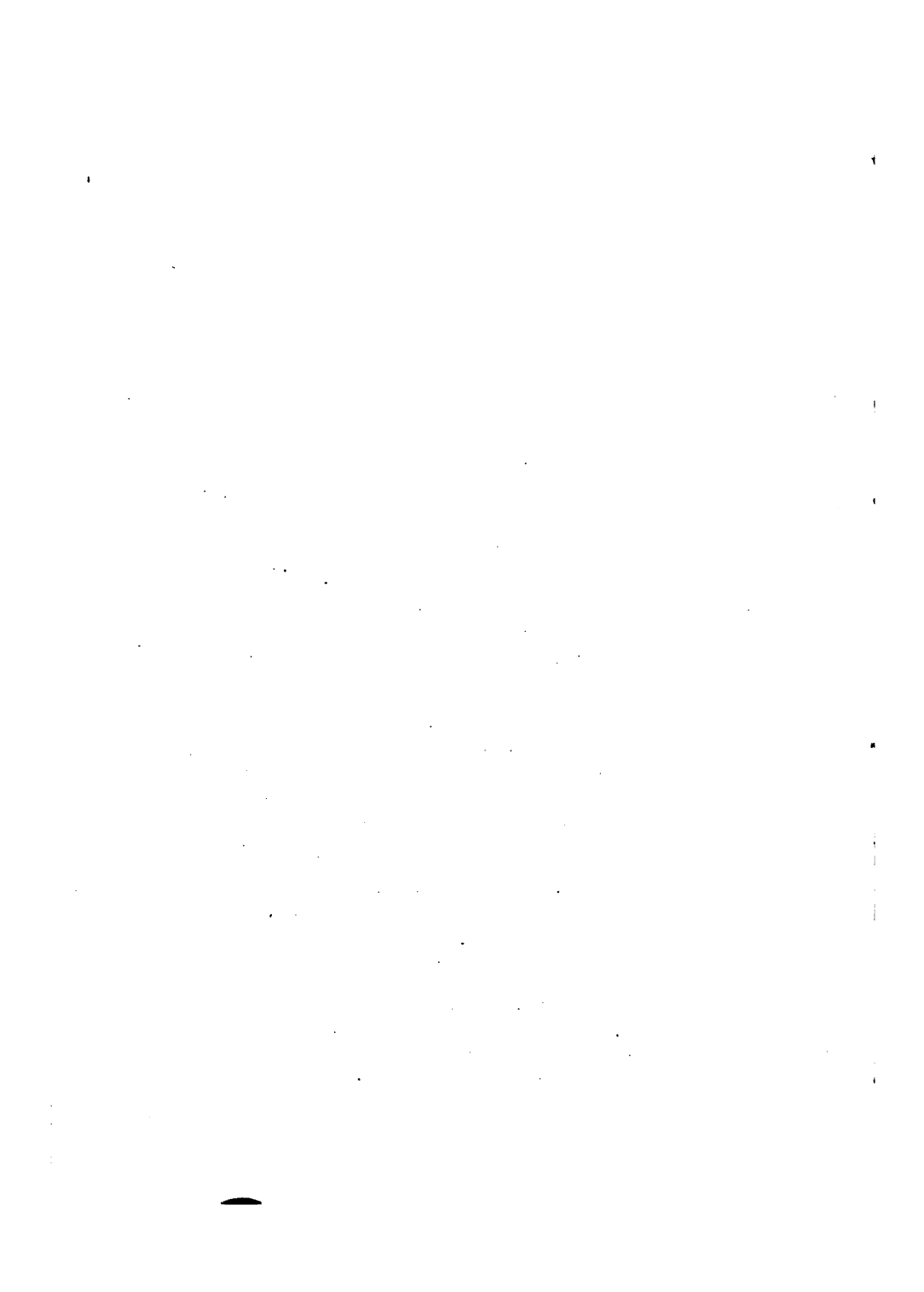
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SELECTED ARTICLES ON GOVERNMENT OWNERSHIP OF RAILROADS

INTRODUCTION

Transportation is essentially a public service, and wherever railroads have been built, upon the government has devolved the obligation of rendering aid in their construction and of supervising or regulating their management and operation. The character of such aid and regulation varied considerably with different countries. In some cases, public aid was limited to the granting of the right of eminent domain in order to enable the railroads to secure the necessary right of way. More often, however, governments supplemented such assistance by the purchase of railway stocks and bonds, by the loan and donation of public lands and funds, by guaranteeing to private investors a fixed minimum return on their investments, and by engaging directly in the construction of roads.

Regulation of the railroads varied as widely as the nature of the aid rendered by the government. In some cases, it was limited to the barest supervision, the aim being to leave private capital as unrestricted as possible. This was the *laissez-faire* policy originally followed in the United States, which gradually gave way to increasingly strict regulation. Most countries where private ownership prevails provide for thoro and detailed regulation, and in many cases, the roads are owned and operated directly by the government.

In the United States, the railroads were constructed largely by private enterprise, although public aid was very generous. States, counties, municipalities, and later the national government, rendered assistance in the shape of grants of land, loans or donations from the public funds, and also in the building of roads. Construction was pushed rapidly and even recklessly, and the necessary safeguards were not placed around the public

funds. The result was that many of the roads failed to be remunerative, and became bankrupt, the states were forced to sell the roads to private investors or in some cases to repudiate their debts, and local investors lost a large part of their stocks and bonds to the benefit of Eastern capitalists who were able to take over the roads.

Up to this time government supervision had been of the simplest sort, but now the antagonism of the local farmers and business men against the owners of the railroads, and the gross discriminations practised by the roads against some individuals and localities in favor of others, resulted in a demand for thorough regulation.

In this matter, the states preceded the federal government by some years, and the form of regulation most generally adopted was the commission. These state commissions were formerly of two types, the supervisory and the mandatory. The supervisory commission was the first to appear and was employed in Massachusetts, Pennsylvania and other Eastern states. It had the power only to investigate railroad practices and to report its findings to the legislature and to the people. It might also make suggestions as to future legislation to be adopted. The mandatory commission, adopted in the West and South, had not only the power to investigate and report, but also to issue orders to the railways and to enforce its orders by judicial procedure. Among the powers of this type of commission was that of prescribing maximum charges and of fixing rate schedules. Both these types gradually gave away to a newer form, the public utilities commission. This type of commission has mandatory powers, but its scope is extended to include other public utilities as well as railroads. For example, the Pennsylvania commission has jurisdiction over twenty-seven classes of corporations, including, among others, railroads, canals, street railways, telegraph, telephone, gas and water companies.

The first legislation passed by Congress for national regulation of railroads was the Interstate Commerce Law of 1887. This law has never been repealed, but has remained in force to the present time and has been strengthened from time to time by various legislative acts. This law originally provided for the establishment of the Interstate Commerce Commission—a commission of seven members and of the mandatory type. This Commission now has jurisdiction over railroads, express

and sleeping-car companies, and telegraph, telephones and cable companies, and among its powers are those to adjust rates, to prescribe methods of accounting, to investigate complaints and to make investigations upon its own motion, and to carry on proceedings to enforce its orders. The law also prescribed the powers of the Commission with respect to unreasonable discriminations between individuals and places, pooling, and higher charges for shorter than for longer hauls over the same lines.

At the present time, therefore, instead of the policy of no regulation which characterized the first period of our railway history, we have regulation both by the United States, thru the Interstate Commerce Commission and acts passed by Congress, and also by each of the forty-eight states thru its commission and the acts of its legislature. The amount of regulation attempted by these forty-nine agencies is tremendous. It has been computed that between 1912 and 1915 alone, upward of 4,000 bills affecting the railroads were introduced into Congress and the state legislatures, and of these 440 became law.

That present conditions in our railway service are unsatisfactory is evident from the amount of complaint leveled upon it from all sides. Shippers complain of the rates charged and the inability to get the kind and amount of service needed. Railroad employees are demanding higher wages and shorter hours, and, as the circumstances surrounding the passage of the Adamson Eight-Hour law have made plainly apparent, are powerful enough to gain prompt recognition of their demands. The public generally, with the memories of past railroad misdeeds still fresh, feel that lower rates could and should be granted and yet hesitate to invest their savings to furnish additional capital for the railroads, because of the existing uncertainties surrounding such investments. The railroads complain that they are faced on one hand by the constantly rising costs of materials and operation, increase in wages, and the demand for more and better service, and on the other hand by the inability to meet these demands by increasing their charges or by acquiring sufficient new capital.

The blame of this state of affairs is generally laid to our system of regulation. Regulation by forty-nine commissions has resulted in legislation over every detail of the financing, and operation of our railroad systems. Much of it is duplicated and therefore needless; much of it is conflicting, making repeal by

the courts necessary; and often one state will pass laws discriminating in favor of the citizens or the railroad lines in its own territory. So serious has the matter become that President Wilson, in his message to Congress, December 7, 1915, appealed to Congress for a commission to inquire into the situation.

As a result a joint committee of Congress consisting of five senators and five representatives, and headed by Senator Francis G. Newlands, was appointed and began its sittings at Washington, November 20 of this year. It is the aim of this committee to investigate every phase of the question—the present system of ownership, management and regulation, and the various suggestions that have been made for improving the situation. There will appear before this committee, railway officials, financiers, representatives of labor, shippers, and official bodies, such as the Chamber of Commerce of the United States, the state commissions, the Railway Business Association, and the railroad brotherhoods. Among the questions to be investigated is that of federal ownership and control. While this investigation is taking place the railroads have begun to test the validity of the Adamson Eight-Hour Law in the courts. In addition to the materials provided for study in this volume the student who wishes to keep up to date on this question will find it necessary to keep in close touch with what is taking place by constant reference to the daily press.

E. M. PHELPS.

November 28, 1916.

GENERAL DISCUSSION

THE INTERSTATE COMMERCE COMMISSION AND THE RAILROADS¹

No problem more important and difficult confronts the people of the United States than that of establishing between their governments and their large business concerns relations which will promote greater equality in the distribution of the burdens and benefits of the production of wealth, without impairing the efficiency with which production is conducted. There has been within recent years a great increase in the amount of government regulation of business. Its main purpose has been to equalize economic burdens and benefits. The most important experiment being made in this field is in the control of railroads. This experiment is so important partly because the railway industry is one of the largest in the country. It is so important partly, also, because there is a tendency for large classes of commercial and industrial enterprises to pass mainly into the hands of a comparatively few large aggregations of capital. This tendency, if continued, will give quasi-monopolistic power to a few concerns in these other fields. There will then be as much reason for subjecting them to strict regulation as for subjecting railways to it. The policy applied to them probably would be modeled on that applied to railways, having alike its strength and its weaknesses. Therefore, the wisdom or folly of our regulation of railways may determine the wisdom or folly of our regulation of other classes of concerns and the success or failure of government control of business in many fields.

The system of regulation adopted for railways consists partly of the passage of laws imposing on them specific and detailed requirements, but mainly of the delegation of authority over them to commissions. The Interstate Commerce Commission is the most important body to which such authority has been given.

¹ By Samuel O. Dunn, editor of the *Railway Age Gazette*. Published in *Annals of the American Academy*. 63: 155-72. January, 1916.

Therefore, the success or failure of government regulation of railways, and even of public regulation of business in general, will be determined largely by the amount and nature of the power given to the commission and by the courage and wisdom with which it is exercised. An adequate study of its authority, of the way it is doing its work, of the results being produced, and of the changes, if any, which ought to be made in the laws defining its authority and duties, or in the policy which it is following, would occupy an important place in an investigation and discussion of the relations between our governments and our commerce and industry. Limitations of space forbid, however, the presentation in this article of more than an outline of the points that should be covered in a comprehensive discussion of the relations between the commission and the railways.

Some Results of Regulation

Regulation of the railways by the federal government began with the passage of the Act to Regulate Commerce in 1887. Their regulation by states began with the Granger movement more than a decade earlier, and in some states has been effective and even drastic most of the time since. But effective regulation throughout the country, both national and state, did not begin until 1906, when the Hepburn rate act was passed. It has, therefore, had a life of less than ten years.

As a preliminary to analysis and discussion of the policy followed since 1906, it is desirable to take a general survey of the trend of affairs in the railway industry during this time. It is easy to show that regulation in general, since it became effective, has accomplished much good. It has destroyed the railways' domination of politics. It has abolished the issuance of free passes except to certain classes of persons who are expressly authorized by law to use them. It has extirpated rebating and greatly reduced unfair discriminations in the published rates. It has caused the adoption of a uniform system of accounting which has made it more difficult for those in charge of the management of railways to evade public control or deceive or overreach their stockholders. It has given so much publicity to the mismanagement, financial and otherwise, of certain roads as to render such mismanagement more difficult and improbable in future. This is but a partial list of the good results it has achieved.

At the same time, regulation has produced, or contributed toward producing, other effects more questionable. In the decade before 1906, without there being any considerable advances in average freight and passenger rates, the earnings of the railways increased more rapidly than their operating expenses and taxes. There were, in consequence, large increases in their net income, which enabled them to recover from the effects of the panic of 1893 and of the depression which followed it; and a large amount of new mileage was built and unprecedented numbers of locomotives and cars were bought.

On the other hand, during the period since 1906, despite great improvements in machinery and methods of operation, the expenses and taxes of the railways have increased faster than their total earnings. They have found it necessary year by year to make large additions to their investment in property per mile of line. This coincidence of increasing investment and declining net revenue has caused a serious reduction in the percentage of return earned. In the fiscal year ended June 30, 1914, the last year for which we have complete figures, the investment in road and equipment per mile of line was \$71,551, an increase since 1906 of \$11,927. Gross earnings per mile were \$12,667, an increase of \$2,207, or 21 per cent. Operating expenses and taxes were \$9,794, an increase of \$2,546, or 35 per cent. In consequence, net operating income per mile was only \$2,873, or \$339 less than in 1906, a reduction of 10½ per cent. To summarize, the investment per mile was \$11,927 more in 1914 than eight years before, but the net money per mile available with which to pay a return on it was \$339 less. In 1906 the percentage of net return on property investment was 5.39 per cent; in 1914, only 3.99 per cent.

This decline in net return has rendered it increasingly difficult to pay interest and dividends and raise new capital. Many roads have become bankrupt and on October 1, 1915, 42,000 miles of line were in the hands of receivers. This is the largest mileage of insolvent roads ever known. The construction of new mileage under way is less than at any time in fifty years. Until lately the orders placed for equipment and supplies were at their lowest ebb. These conditions threw hundreds of thousands of the workmen of the railways and of railway supply and equipment manufacturing concerns out of employment.

The increase in the outgo of the railways between 1906 and

1914 was due chiefly to two causes. The average wage per employee advanced from \$611 to \$810, or 32.57 per cent. The taxes per mile advanced from \$336 to \$568, or 69 per cent. The increases in taxes were, of course, made by public authorities. A large majority of the advances in wages were awarded by arbitration boards organized under the federal Erdman act. There have been other, although smaller, increases in expenses which have been more directly due to state and federal regulation. The railways have tried to make general advances in rates to offset, at least partially, these increases in their outgo. The regulating authorities, national and state, have prevented most of these and have caused many reductions in both passenger and freight rates, and the average passenger and freight rates are lower now than in 1906, despite the great increases which have occurred in wages, taxes and other expenses.

On this showing the heavy reduction in the net return of the railways and the effects which it has produced must be attributed mainly to government regulation. As the Interstate Commerce commission is the most important regulating body, many people give it the credit or blame, commending it if they regard the general result produced as good and condemning it if they consider it bad. It is probable that a majority of business men and students of economic and industrial affairs believe the reduction of railway net earnings has been unjustified and has had a bad effect on business generally. Therefore, among these classes the Interstate Commerce Commission is a less popular and more criticized body than a few years ago.

But much of the criticism visited on it is misdirected. The commission is often called the most powerful governmental body in the United States. In a sense, it is so. It has large authority over the railway industry, which involves the possession of great power to affect the national welfare. But an examination of the laws and court decisions under which the commission acts shows that its authority, while great, is fragmentary and subject to many limitations; that it is more negative than positive; that it is such that the harm which the commission can do if disposed to be unfair is greater than the good it can do if disposed to be fair.

How our system of regulation has grown up is illustrated by the way in which from time to time its powers have been conferred on the Interstate Commerce Commission. As already stated, the act to regulate commerce went into effect in 1887.

There had been prolonged, widespread and well-founded complaints of rebating and other forms of unfair discrimination in rates, and the law was passed mainly to abolish these practices. It prohibited rebating and other forms of unfair discrimination, and forbade rates to exceed reasonable maxima. There was apprehension lest the pools of traffic and earnings which had been formed by various groups of competing lines would cause rates to be made and kept excessive, and therefore pooling also was prohibited. The Interstate Commerce Commission was created to enforce these provisions. It understood it was authorized to prescribe and put into effect maximum reasonable rates; but the Supreme Court of the United States held otherwise.

During the twenty years following the creation of the commission the question of rates, and especially the rebating phase of it, continued to absorb public attention; and regulation, state and national, dealt mainly with this question. Several minor amendments to the Interstate Commerce law, all dealing with rate matters, were passed, and in 1903 the Elkins law was enacted, strengthening the provisions against rebating. In 1906 was passed the Hepburn act, specifically authorizing the commission, when it found rates unreasonable, to fix maximum reasonable rates. In 1910 was passed the Mann-Elkins law, empowering the commission to suspend advances in rates pending investigation of them and to prohibit them if found unreasonable. Meantime, 1890, there had been enacted the Sherman Anti-Trust law.

Originally assumed to have no application to railways, this law was soon construed by the courts to prohibit all agreements and combination between competing carriers.

Gradually the attention of the public and its representatives began to be directed toward other phases of the railway business. The Hepburn act authorized the Interstate Commerce Commission to prescribe a uniform system of accounting. This the commission did, and many states followed its example.

As early as 1893 Congress had begun the physical regulation of railways by passing the Safety Appliance acts, requiring the use of power brakes and automatic couplers. The Erdman law of 1898, providing a scheme of conciliation and arbitration of disputes between railways and their employees in train service, was intended as a regulation of operation, its principal purpose being to prevent interruptions of service by strikes. After being long ignored, this statute, now in amended and strengthened

form known as the Newlands act, has in recent years often been resorted to with important results.

Within the last ten years, federal laws affecting the physical equipment and operation of railways have followed each other in rapid succession. In 1907 an act was passed limiting the hours of service of railway employees. In 1908 the kind of ashpans to be used on locomotives was prescribed. In 1909 the transportation of explosives was dealt with. In 1910 the present Employers' Liability act applying to interstate carriers, was enacted, and provisions were adopted affecting all safety appliances used on locomotives and cars. Still later there was passed an act for the inspection of locomotive boilers, which, at the last session of Congress, was made to cover the entire locomotive. The Interstate Commerce Commission has nothing to do with the arbitration of labor disputes, but is required to administer and enforce most of the federal laws affecting operation.

The example set by Congress during the last ten years in passing laws relating to physical equipment and operation has not only been followed but greatly surpassed by most of the states. During the last five years the states have adopted no less than 442 laws relating merely to the physical operation of railways; and in numerous cases the legislatures and commissions have regulated features of the business which Congress has not touched or authorized the Interstate Commerce Commission to deal with.

Limitations on the Commission's Authority

The foregoing shows that, as already has been stated, the Interstate Commerce Commission's power is fragmentary. Its authority even over the phases of the railway business with which it does deal is restricted in various ways. Its authority over rates is great, but far from unlimited. The extent of its power over state rates is unsettled. In the Shreveport case it was held that, if a state rate prescribed by a state authority was so low compared with a related interstate rate as to be unfairly discriminatory against interstate commerce, the Commission could compel the railways to remove the discrimination even though this involved the advance of the state rate. But it is conceivable that a state rate fixed by a state commission or legislature may be too low as compared with interstate rates approved by the Interstate Commerce Commission, and yet not be so

related to the interstate rates as to work directly, at least, an unfair discrimination. What control, in that case, can the Commission exercise over the state rate? The courts will not interfere with either interstate or state rates merely because they are low unless they are actually confiscatory. How much it may be reasonable and expedient for rates to be kept above the line of confiscation is a question of public policy to be determined by law-making bodies and commissions.

The commission's authority over even interstate rates is restricted in a vital particular. Many state commissions may fix the absolute rates which must be charged, and the railways can neither advance nor reduce them. The Interstate Commerce Commission may prescribe reasonable *maximum* rates and prohibit unreasonable *advances*, but it cannot fix reasonable *minimum* rates or prevent unreasonable *reductions*. Suppose the commission prescribes for a certain territory a schedule of rates which it holds to be reasonable and non-discriminatory. All the railways in the territory but one may accept it. This one may choose to make a reduction at one point which will cause an unfair discrimination. The commission, in such a case, is powerless to prevent the reduction and the consequent discrimination. Suppose, again, that the railways in a territory show they are not deriving from all their rates enough net revenues to enable them to serve the public properly. At the same time they suggest advances in the rates on certain commodities. The commission may believe that the needed revenues should be secured by increasing the rates on a different group of commodities; but it cannot deal fairly or adequately with the situation because, while it can refuse the advances for which the railways ask, it cannot cause the advances which it thinks ought to be made.

The competition between the railways in making rates often becomes so excessive as to result in unfair discriminations. Existing laws prohibit agreements or arrangements between them to limit competition in interstate commerce. If the pooling of traffic or of earnings were allowed as in done in almost every other country, roads which desire to keep rates reasonable and non-discriminatory could offer inducements to their rivals to do so.

The commission's authority over the way railways shall be constructed, maintained and operated is much more limited than its authority over rate-making. In numerous states the commissions, by general provisions of law, have been given extensive

discretionary control over the physical management of railways. In some states, by declining to issue "certificates of public convenience," they can even prevent new lines from being built at all. In many they can order the construction and control the location of passenger and freight stations, prescribe the headlights that shall be used, require the installation of block signals, and regulate the furnishing of freight cars and the schedules of passenger trains. The authority over physical management given to such commissions is, as already shown, supplemented by hundreds of state laws regulating details of construction, maintenance and operation. On the other hand, the legislation enacted by Congress regarding physical management and operation is of a piecemeal nature. While the Interstate Commerce Commission prescribes the safety appliances used on locomotives and cars, it has nothing to say about block signals. It inspects and regulates locomotive boilers, but has no authority to regulate road-way and track. It may require the establishment of satisfactory through routes, but cannot interfere with an attempt by a lock-out or a strike to interrupt transportation and close all routes. It has no part in the settlement of labor disputes, which may have the greatest influence on the kind of service that will be rendered and on the cost of rendering it. When state legislatures and commissions, in the nominal regulation of state commerce, impose on the railways requirements as to headlights, train crews and clearances, which affect interstate more than state commerce, the Interstate Commerce Commission cannot interfere; it has no authority over such matters.

Comparatively limited as is the commission's power over the physical management of railways, its authority over their financial management is still more restricted. Practically all railways are engaged in interstate commerce. Investors in them are scattered throughout the country. Yet, while many states regulate the issuance of railway securities, the Interstate Commerce Commission is without authority over this part of the railway business.

The facts presented in the foregoing portray an anomalous situation. The railway question is emphatically a national one. Most railways operate in more than one state and many lines in six, eight or a dozen. A vast majority of the traffic handled is interstate. There is no state in which the state traffic approaches

the interstate in amount, and in some the interstate traffic is 90 per cent or more of the total. The Constitution, by repeated interpretations of the courts, makes the federal authority to regulate interstate commerce paramount to the state authority to regulate state commerce. The desirability of the assertion and exercise by the federal government of its paramount authority over commerce usually is recognized by the public with great promptness and clearness. Nobody would seriously consider a proposal to let each state deal separately with the tariff question, imposing duties that would affect both interstate and foreign commerce. The federal government exercises exclusive authority in the regulation of commerce on navigable waterways.

Comparative Effects of State and Federal Regulation

The present system cannot be defended on the ground that state regulation gets better results than interstate regulation. The national government, and especially the work done by the Interstate Commerce Commission, deserves credit for most of what is unquestionably good that has been accomplished. On the other hand, most of the questionable or positively bad results of regulation cannot be attributed to the federal government.

In a few states, among which Wisconsin ranks first, most of the regulatory legislation has been intelligently and fairly drafted; the members of the commissions have been chosen because of their special fitness, and have not allowed political or other improper influences to control them; and regulation has, in consequence, been fair and beneficial to both the railways and the public. But as to most states the opposite of all these statements would more accurately express the truth. Furthermore, the policies followed by the states, and even by states adjacent to each other, have been utterly wanting in consistency and uniformity, and often have been directly conflicting. State legislatures have passed most of the laws and state commissions have issued most of the orders affecting railway rates and operating expenses; and to them are fairly attributable most of the bad effects which railway regulation has had directly on the railways and indirectly on the welfare of the public. That this is the case will more clearly appear when we consider the policies which the states, on the one hand, and the national government, on the other, have followed.

State Versus Federal Policies

The states within the past four years have passed 442 laws for the regulation of the physical operation of railways. These have been supplemented by innumerable orders issued by state commissions. In one respect, and in one only, have most of these laws and orders been alike. Practically all have tended to increase railway expenses. A large part have been enacted to enable special classes of persons having large political influence to benefit directly by the increased expenditures made necessary. This has been true, for example, of the many so-called "full crew" laws which have been enacted, the real purpose of which has been to compel the railways to employ men they do not need.

The federal government has passed some laws tending to increase railway expenses. In some cases these have been enacted as the result of the pressure of interested classes. But there usually has been some justification for the federal laws which have been enacted. Furthermore, a federal law has the advantage that it applies uniformly throughout the country. Finally, the Interstate Commerce Commission, in the administration of statutes affecting operation, usually has been intelligent and fair. It may sometimes manifest a disposition to give undue consideration to the wishes of the labor organizations; but in the administration of the hours of service act, the safety appliance act, and the locomotive boiler inspection act, for example, it has usually given satisfaction to both the railway managements and the railway employees.

The policy of the states regarding the issuance of railway securities has been extremely unsatisfactory. For years most of them let railways issue bonds and stocks without any supervision or control. There has been much complaint regarding the over-capitalization of some roads. Most railway corporations have been created by the states and if the states had not failed to exercise proper control over their financial management the over-capitalization complained of could not have occurred.

The inconsistencies between the policies followed in different states is strikingly illustrated by the legislation in the adjacent states of Massachusetts and Connecticut. The Massachusetts law both required the issuance of securities to be approved by the railroad commission and specified the purposes for which they could be issued. Connecticut imposed no similar restrictions. The New York, New Haven & Hartford had charters from both

states. The laws of Massachusetts, if they alone had controlled, would have prevented the "high financing" which was a main feature of the Mellen management of the road; but the laws of Connecticut permitted it. Therefore, it was carried on under the road's Connecticut charter regardless of the laws of Massachusetts.

New York, Wisconsin and some other states have within recent years passed strict laws for the regulation of the issuance of railway securities. But when a railway is required to be chartered under the laws of more than one state and to receive approval of security issues from more than one commission, the expenses and trouble incurred are needlessly multiplied and the subject is likely to be differently dealt with in different states. There is no reason for expecting or hoping that regulation of railway securities will ever be intelligently, fairly and beneficially conducted as long as it is left in the hands of forty-eight states.

In 1906 and the years immediately following, numerous states, by legislation or the orders of commissions, and usually without any real investigation, required general reductions in freight rates. In many cases they made the state rates lower than the corresponding interstate rates. In more recent years the railways have appealed to the legislatures and commissions of many states for the restoration of some of these rates, presenting masses of data showing the downward tendency of net earnings. Some advances in state freight rates have been allowed, as in New England, Alabama, Michigan and Missouri; but in most states the public authorities have been hostile to any considerable increases.

Furthermore, many of the individual states try to so adjust the rates within their borders as to effect unfair discriminations in favor of shippers in their own states and against those in other states. The Interstate Commerce Commission in the Shreveport case attacked such an adjustment of rates which had been established by the Texas commission for the purpose of giving Texas shippers an advantage in certain markets in East Texas over shippers at Shreveport and other points in Louisiana. It held that the regulation of rates by the Texas commission was unreasonable and worked an unfair discrimination against interstate commerce, and the Supreme Court of the United States upheld this conclusion. The Interstate Commerce Commission has been trying ever since to remove the discrimination; but so pertina-

cious has the Texas commission been in its efforts to maintain the unfair advantage of the shippers of its state that the Railroad Commission of Louisiana very recently filed another complaint with the Interstate Commerce Commission regarding the policy of the Texas commission.

On the whole it must be conceded that the Interstate Commerce Commission's regulation of freight rates has been much more intelligent and fair, and, consequently, less one-sided, than that of most of the states. In fact, there are now in effect many state freight rates which are lower than the corresponding interstate freight rates, whereas, for reasons familiar to all students of the subject, state rates ought ordinarily to be higher than corresponding interstate rates.

Besides having been more fair as between the railways and the public, regulation of rates by the Interstate Commerce Commission has the advantage of being governed by national and not by local influences and considerations. The unfairness of the attitude of most state commissions is illustrated by the fact that seven of them actually appeared in the Five Per Cent Case as parties in opposition to the proposed advances in freight rates in eastern territory, and that sixteen of them appeared as parties in opposition to the proposed advances in both freight and passenger rates in western territory.

Conclusions Suggested and Changes in Regulation Needed

The facts presented in the foregoing bring out clearly several points which are of much gravity and importance but which unfortunately are not generally understood. They show that the Interstate Commerce Commission cannot be held solely, or even perhaps mainly, responsible for the serious reduction of railway net earnings, so far as it is attributable to regulation, because the Commission has not done most of the regulating. The federal authority over interstate commerce is exclusive, at least when exercised, and is paramount to that of the states over state commerce. The facts show, however, that the Interstate Commerce Commission is exercising, and has been expressly empowered to exercise, practically no control over state regulation even when it affects interstate commerce and interstate regulation; while, on the other hand, state legislatures and commissions are so regulating state commerce as seriously to burden interstate commerce and to interfere with federal regulation. They show that in

regulating rates many states are trying to further the interests of their own people at the expense of those of the rest of the nation. They show that in their regulation of operation the states are often influenced by political and other improper considerations; that the requirements they impose upon the railway are consistent only in increasing operating expenses; and that most of the increases in operating expenses they cause have to be borne not by state but by interstate commerce, since interstate traffic constitutes the great bulk of the total handled. They show that in the regulation of the issuance of securities the states have been entirely inconsistent; that they have been excessively negligent in some cases and excessively stringent in others. They show, if past experience is a safe criterion, that so long as the individual states are left free to take their own heads the regulations imposed by them will be utterly wanting in uniformity, and even directly conflicting.

The facts further show that the authority, even over interstate commerce, which has thus far been conferred on the Interstate Commerce Commission is incomplete and fragmentary. Its power over rates is merely the power to keep them from being made too high. It cannot keep them from being made too low even when this may be necessary to prevent unfair discrimination or to accomplish some other public purpose. It cannot authorize an agreement between competing railways regarding service or rates even though such an agreement would prevent unfair discrimination, reduce the cost of operation or result in improvement in the service. It has no part in the settlement of disputes between railways and their employees, although the way they are settled may have the most potent influence on the character and cost of the service rendered. It can regulate the physical management of the railways in only a few particulars, and it cannot directly regulate their financial management at all. The facts show, however, that with powers more limited than those of many state commissions, the Interstate Commerce Commission has done much less harm and a great deal more good than the regulating authorities of the states.

The conclusions to which these facts point are clear. Neither the Interstate Commerce Commission nor any other body should be held responsible for the results produced by any system which it cannot direct and control. The results produced by our system of railway regulation will never be satisfactory until that

system is radically changed. As long as the states are allowed to regulate the railways without control by the federal government they are sure to continue to so regulate them as to impose burdens on interstate commerce and to interfere with federal regulation. But since our commerce among the states is vastly more important than that within the states, if the regulation of the one is to affect that of the other then the regulation of the larger and more important part of our commerce should be made supreme and controlling over the regulation of the smaller and less important part. The obvious way in which to do this is either to empower the Interstate Commerce Commission to regulate both state and interstate transportation or to so increase its authority over interstate transportation as to enable it to veto any action by state legislatures or commissions which will directly or indirectly burden interstate commerce or interfere with interstate regulation. There is no question about the power of Congress to do this.

GOVERNMENT AND THE RAILWAYS¹

Business and government are beginning to understand each other better—a development in attitude born of expediency on the one hand, and an awakened consciousness of responsibility on the other. Business in its present form is a distinct social evolution, based on the elements of human dependence. In fact, it not only antedates organized society, but it was the one thing most conducive to the association of man without which he would still be encased in the shell of primitive darkness.

As government sprung logically from the social organization, then a very simple analysis establishes the important part that the mere exchange of products and utilities has played in the whole scheme of things. This very obvious co-relation makes it difficult to account for the prejudice which government so long held for business. And yet we must not delude ourselves into the thought that the human element was lacking in this estrangement. The tendency of government is but the impulse of humanity. Laws are but the reflex of a controlling public desire—

¹ Address by Honorable James M. Cox, Governor of Ohio, delivered at the fifth annual dinner of the Railway Business Association, the national association of manufacturers of railway materials, equipment and supplies, December 11, 1913.

the act of government being as closely joined to the social organization as the movement of the arms to the mind which directs them.

So that we are brought confessedly to the proposition that the mass has been drawn into agreed opposition to the class. There is a high average of fairness in public opinion, the admission of which brings the thought that unfair advantages have obtained somewhere. As our government is designed to maintain the largest measure of equality and opportunity possible, then it must adjust itself to the useful function of correction.

So-called big business was chartered by government, and if the child has been guilty of abuses, the parent is not blameless for permitting them to go on until they assume the form of a distinct menace to the industrial life of the nation. Everyone but the cynic grows into an acceptance of the philosophy that things balance up pretty evenly in the game of life, and it would seem that the agencies which by one form or another postponed the day of governmental regulation find the consequences falling upon them with some severity. On the other hand, the nation, now aroused from the lethargic spirit of letting well enough alone, finds the results of its long neglect spread into every community.

The country is now facing a responsibility which must be met with candor and courage. Something must be done with the railroad question. Let us discuss it frankly in its important phases.

First—The part which transportation plays in our affairs, and in the development of the country.

Second—The real condition of the railroads, physical and financial.

Third—The cause of the present confusion.

Fourth—The remedy.

Importance of Transportation

It is surprising upon analysis of industrial activities to find the potential part that the railroads play. Ours is a great country of vast domain. Our lands possess the diversified fertility which yields the extremes of corn and cotton. Our mines give up the richest treasures in all the world. The genius of man lays hand on the waterpower of our rivers. We enjoy the varying climates common to every region from St. Petersburg on the

north to Palestine on the south. We attract the strong, red blooded people of all nations, and as they pass through the melting pot of the American institutions, there comes from it that wonderful composite figure, the American citizen. And yet, with all these God-given advantages, what would it avail the great northwest to grow bread for millions if its products could not be transported all over the world, inducing in steady flow the yellow stream of gold? The south, facing the future with every promise of restored commercial strength, would fall into stagnation if the means were not provided to convey cotton from the plantation to the spindles and looms of the globe.

The great middle west, a giant in the part it plays in the affairs of man, would lapse into decline if transportation lines did not tap the fields of this vast universe. We are a great people because we produce practically everything necessary to civilization. We are essentially a nation of traders, because the north, south, east and west must sell to and buy from each other.

We are a concrete mass in commerce because the genius of man has solved the problem of distance and isolation. Lay down the map of the republic and trace the network of railroad lines. In combined mileage they span the distance from the earth to the moon. They pierce every state. In 1912 they transported 1,019,658,605 passengers. Over every mile of track were carried more than a million tons of freight and 138,169 passengers.

The vast organizations are held together by a spirit as impressive as that dominating an army. No order of loyalty exceeds that of the vast majority of officers, while the privates unflinchingly face dangers every day that would try the metal of the seasoned soldier.

The great trunk lines and feeders resemble the circulation system of the human body.

And if you lay your finger on the pulse of the railroad organism you have certain and unmistakable symptoms of the country's prosperity or adversity. One out of every twelve male adults in this country is employed by the railroads. Their contribution to labor and manufacturing makes up one-twelfth of the commerce of the land. No city of any size has grown without a railroad.

Certainly none will deny how important the railroads are and how essential it is to conserve this utility, and by this is meant, protection from unwise operation, and a guarantee of measurable

safety to the individual and institutions that have hazarded their capital. The health of the railroads is very far reaching, when we consider that aside from the ordinary investor, life insurance companies, holding in their hands the hopes and expectations of almost thirty million policyholders, have invested one and a quarter billion dollars in railroad securities.

Condition of the Railways

Now, what is the condition of the railroads? We have enjoyed unprecedented prosperity. Commerce has its ups and downs but the tonnage of the railroads continues stupendous. Terminals in every city are insufficient. There is congestion at these points which interferes with the normal tide of travel. Service is beginning to show the lack of old time regularity. Rolling stock is inadequate in some respects. The development of the country makes a call on the railroads for extensions and equipment, which finds an enforced feeble response. They could advantageously to the public use hundreds of millions of dollars right now.

Three years ago James J. Hill, with a vision that was almost prophetic, stated that the railroads should for five years expend a billion dollars annually for construction, if they were to handle the business of the country efficiently. He predicted congested terminals, and vastly inadequate facilities, and events show the wisdom of his observation.

With the public and the railroads in agreement on the proposition that the march of progress has passed the transportation business, the fact remains, that the railroads cannot borrow the money to provide for the situation. Short time notes have been given to meet current and emergency expenses, and if the banks of the country were to demand payment we would be in the throes of a well organized panic. Investors have been driven to other fields, notwithstanding no business is based on a more stable utility than that of the railroads. The amount of securities listed on the New York Stock Exchange by steam railroads in 1912 was the smallest in ten years.

Railway Regulation

While there can be no difference in opinion with reference to the utility of the railroads, their present physical and financial condition, and the necessity of their conservation, there may be a

vast divergence in views with reference to what has brought about the present situation and the correct remedies which must come from both the common sense and fairness of the American people. Where symptoms are so well marked it seems to me that the diagnosis ought to be measurably easy. You hear in many quarters the statement that adverse legislation and the policy of regulation by the government—state and federal—are the largest contributing factors. I do not subscribe to this view. In fact, sane regulation will become the ultimate salvation of the business.

One cannot resist the thought, when he surveys the abuses of overcapitalization, financial adventure and personal exploitation, that the mistake in regulation has been that it didn't come soon enough. Prior to regulation by government 20 per cent of the railroads of the country were in the hands of receivers. This was the situation in 1894. It cannot but be regarded as significant that the New York Central, Baltimore and Ohio and Pennsylvania Railroads, with a combined capital stock of \$934,000,000, have issued since 1900, during the period of increased regulation, stock to the amount of \$548,000,000, upon which they realized more than \$600,000,000 in cash, the securities having sold at a handsome premium.

No one will contend that the laws in some of the states have not been unduly burdensome. The truth is that in the political affairs of a nation the two harmful elements are cowardice and corruption, and as debasing as corrupt influences have been, the ultimate harm from cowardice in public station has been infinitely greater. Personal political expediency is too apt to rise transcendent to the public welfare. There has been a regrettable absence of that order of courage to withstand some legislation born of prejudice against the railroads, and I believe you gentlemen will agree that this prejudice developed in considerable degree because of the unwise and, in some instances, reprehensible administrative policies of some companies.

No one will seek to condone the practice of milking railroads in order that the executive officers and directors might be illegally and immorally given vast fortunes through the artful and insidious method of contracting with themselves for construction work. No man in conscience will avow the propriety of a wildcat policy in the issuance of securities. No community in America will produce the man who will attempt to justify the practices which have shaken the confidence of the conservative

thought of New England. These abuses of power, like every other disaster, in social or economic life, have their compensations. There is always a hidden blessing which plays its part in working out an ultimate evolution along the lines of morality and sound business policy. There is no saying more truthful than that the hazard always makes the man; and it is fortunate that over the wreckage of these misguided projects there come men with a vision, a humanity and a courage which give hope to this whole country, which cannot but look upon the situation with grave concern.

The method of regulation by government which prevents preferential rates and rebates is not only helpful to the railroads themselves, but it is a dignified participation of government. These quasi-public corporations spring into life by the consent of society through the agencies of government. That is the first and essential element of vitality to the project; and the institution responsible for the birth of the corporation not only has a constitutional right to retain a reserve power of control, but the moral obligation to do so is just as binding. The misconduct of the child is a reproach upon the parent if he has been remiss in his duty. It is unfortunate that the railroads in their failure to recognize the ultimate advantage from regulation, drifted for a time into a nation-wide policy of resistance, and this resulted in some instances in a too large corporate participation in politics.

The Remedy

Now, what is the remedy?

First of all, we might just as well recognize at the outset that a puritanical severity with stockholders who honestly acquired their securities is not going to do any good. The thing to do is to restore the patient and then prescribe and enforce a diet and behavior which will prevent recurrent illness. The man who stands for progressiveness in government bases his plea upon the theory that all things are changing; that man and his activities must fall into inevitable subjection to the laws of evolution; and we remind the ultra-conservative that things not only change in business, in professions, in the sciences, in all the agencies of life itself, but that each age brings its changes in accepted fundamentals of justice.

Our fathers subscribed to many things in full conscience that are shocking to present day ideals. My reference is obviously

to the offense for witchcraft, imprisonment for debt, and the property qualification in suffrage. We must therefore be consistent and recognize this as fundamentally just—that the transgression of yesterday cannot and must not be measured with the ethical yardstick of today. It is more creditable, I feel sure, to adhere to this doctrine than to frame a policy of confiscating the holdings of present owners who are in no way to blame for the abuse of those who sold them.

Some may contend that the government is not the guardian of the people in their traffic regulations, one with the other, but that does not reach the question of the government's neglect for years in permitting its corporate creature to run amuck. We have in illustration of this thought, the developments of today in the affairs of the New Haven road. The whole country stands appalled. A great property builded on the resources, thrift and pioneer morals of New England, has been drained of its very blood and bone, through methods that inspired the divine command "Thou shalt not steal." Of the 22,000 stockholders, half are women, many are estates and trustees, a circumstance which speaks the confidence of those now dead. What excuse has government to offer those who lived secure in the thought that it protected the defenceless? What word have the states, responsible for this outrage, to utter in explanation? It would have been impossible of accomplishment in any progressive state. I feel sure the federal government in its present hands will not remain dumb to the constitutional command of absolute control over interstate commerce.

As the responsibility was divided in the first instance, there should now be common acquiescence, as between the government and the railroads, in the suggestion to seal the past and proceed in making of a better order of things on an entirely new base.

If we concede that the agencies of transportation must be healthy in order that the country can grow and develop, then, regulation must proceed on the theory that what society imposes on the railroads, society itself must pay for. If increased taxes, larger compensation for labor, the application of safety devices, the maintenance of expensive schedules and other things, are insisted upon by society, through government, then the railroads, like any other institution, must be given the right and the facility to distribute the burden. The business man meets the increased

cost of his products by adding to his selling price. Augmented costs, due to short crops, or other unseemly circumstances, fall generally upon consumption. If the industry involved were to bear it alone and government prevented the distribution of added expenses, there would be but one result—disaster. So that if we expect the railroads to draw from their earnings to meet the changed and developing conditions of the day, they must receive the same consideration shown to other business enterprises, or the result with them will be the same—disaster.

You cannot buy land for terminals; lay tracks of steel to accommodate the growing traffic of the nation; build spurs to mines, cities or agricultural centers, without an increased cost in investment. You can't sell the securities unless the public is assured of a return on the outlay.

Every phase of the fiscal situation with the railroads suggests that something be done to establish in the mind of the investing public some fixed idea, not only of the inherent value of the railroads, but a national policy, securely supported by an intelligent public opinion, must be framed for the conservation of the transportation utilities, and you cannot conserve the business without conserving the confidence of the country. Railroad men everywhere admit that a new day in the affairs of this industry has arrived, and that the old order of things is displaced, first by the impossibility of extensive exploit and adventure, and, second, by a new moral code which seems to be finding adoption everywhere. The policy of dealing above board with the government, public and shipper, will become the real asset of the railroads. The government is the best agency to give dignified and effective exploitation of that plan. If a railroad corporation desires to work out a project of extension or improvement, and votes a perfectly honest issue of securities, with every intent to disburse them in good faith, the very essence of the whole transaction inspires confidence which will be widespread if some agency without the railroad organization certifies the legitimacy of the enterprise.

THE RAILROAD INDUSTRY¹

Consider for a moment what the railroad industry means to this country.

1,848,883 employees to whom it pays \$1,390,025,286 in wages.

Forty-four cents of every dollar spent by the railroads is paid to labor.

9,244,015 persons dependent upon it for a living, if families of employees be counted.

1,000,000 workers in plants furnishing railroad material and supplies; 5,000,000 counting their families. About 25 cents on each dollar received are paid out for materials and supplies, the bulk of which goes into the pay envelopes of those who produce them.

1,500,000 holders of stocks and bonds, owners of this industry, representing at least 6,000,000 persons in the United States whom it thus helps to support. Railway bonds constitute 49 per cent of all bonds held by savings banks.

20,000,000 persons, over one-fifth of the population, are directly or indirectly interested in the financial results of this industry.

\$2,164,851,210 paid out by this industry in 1913 for expenses of all kinds, equivalent to \$23.33 for every man, woman and child in the United States. Railroad income flows back to the people.

\$129,191,880 paid in taxes in 1913 for the support of national, state and local government, equivalent to \$1.43 for every inhabitant of the United States. The railroads are the country's largest taxpayers.

Result of railroad operations for the fiscal year ending June 30, 1914, compared with the previous fiscal year showed:

Gross earnings	Decreased,	\$44,000,000
Expenses and taxes	Increased,	76,000,000
Net operating income	Decreased,	120,000,000
Taxes alone	Increased,	12,610,402

Average dividend paid in 1913, 4.28 per cent and of total

¹ From address by Howard Elliott, President of the New York, New Haven and Hartford Railroad Company, to the Alumni Association of the Massachusetts Institute of Technology, January 9, 1915.

capital stock one-third paid no dividend and 10 per cent of total funded debt paid no interest.

The American railroads perform a greater service per mile of line at a cheaper rate and pay higher wages than any other railroads in the world.

NEWLANDS OPENS CARRIERS INQUIRY¹

WASHINGTON, November 20.—The first session to-day of the joint congressional committee investigating the broad subject of transportation developed into a preliminary meeting at which Chairman Newlands made a general statement of the purposes of the investigation.

It will relate to every phase of the transportation question, the rail carriers, the river carriers, and the ocean carriers, and the perfection of a harmonious system of transportation embracing rail, river, and ocean carriers that will meet the demands of interstate as well as foreign commerce, and it will also be applied to telegraph and telephone lines; express companies, and other public utilities.

It will embrace not only the subject of government control and regulation of these utilities, but also the wisdom and the feasibility of government ownership and the comparative worth and efficiency of government regulation and control as compared with government ownership and operation.

It will not be possible for us to come to a speedy conclusion regarding all questions, but that conclusion will be more quickly arrived at if we have the sympathetic aid of practical men who for years have been conversant with the practical side of the transportation question, of the economists and publicists, of railway executives and workers of commercial bodies, farmers and manufacturers, and shippers generally.

Government Ownership

Referring to government ownership, Senator Newlands said:

"It is a question that must be faced. Other nations far advanced in civilization have adopted the system. Recently, under the stress of war, almost all European governments have taken

¹ New York Evening Post, November 20, 1916.

over the railways. Whether that will be a permanent taking over or only a temporary one, it demonstrates that, in conditions of great crisis, when autocratic powers must be given to the government, all intelligent governments drift toward absolute and complete operation of the roads as the only solution of the question.

"If we pursue the exercise and the study of government regulation wisely, persistently, and energetically, we may create such a system of regulation as will meet every requirement, both in time of peace and of war, and in exigency or crisis. But it seems to be a wise thing for the government of the United States to ascertain now the history of the countries that have adopted government ownership and operation of railways; and to watch the experiences of the European countries in this great war in this regard.

"In this connection will come the question of the method of taking over the railroads. Shall it be accomplished by an actual valuation of the railways and a condemnation of them, or shall they be taken over by the easier method of taking over the stocks and the bonds at their market value, thus at one step having the national government take the position of stockholder and security holder in these great corporations?"

Calls Strikes Barbaric

Strikes as a means of settling labor disputes, Senator Newlands characterized as "the most barbaric and brutal of processes."

"The question is," he added, "whether a nation pretending to some degree of civilization, which has eliminated the doctrine of force from application to controversies between man and man, and which furnishes judicial tribunals for the settlement of those controversies, and which is now and has been for years endeavoring internationally to secure a system under which the nations of the earth will create similar tribunals for the adjustment of international disputes without resort to force—whether a civilized nation can be content to perpetuate the existing conditions of things."

Hours and wages of employees must be considered carefully, Senator Newlands declared, because "the burdens which constitute the operating expenses of these corporations are in time transferred to the shippers." He added: "They cannot long rest

upon the investors, for if they rest upon them too heavily there will be a decline in the securities, and a consequent difficulty in securing the money for improvements and extensions, and thus the public demands themselves will not be met."

Senator Newlands outlined the proposals to reorganize the Interstate Commerce Commission and to create federal agencies which might supplant state authorities in exercising control over railroad financing. He said:

"The question will be considered as to whether the commission is now overloaded, and if so, whether this difficulty should be met by relieving it of many of the supervising and administrative duties which it now exercises, or by enlarging and subdividing it so as to enable it to meet the strain of its various duties.

Control of Securities

Another question of importance that will come up will be the question of the control of railway and other public utility securities. As it is, most of the state public utility commissions are regulating the issue of securities upon the railroads within the boundaries of the state over which each has jurisdiction.

It is suggested that the United States government by reason of its power over interstate commerce should create a tribunal for that purpose or give such control to the Interstate Commerce Commission. So the question of state rights will be involved in this most interesting subject.

There will also come up the question as to whether the nation or the states should create the great organizations that serve the purpose of interstate commerce. Thus far we have been content to allow the states to create these corporations, these railroad companies.

Commenting on suggestions that railroad taxation be put in the hands of federal authorities exclusively, Senator Newlands said:

"We find the greatest diversity in the tax laws of various states, some states imposing heavy burdens upon these corporations, and others imposing very light burdens, some taxing only the visible property, others taxing the intangible thing termed a franchise; some of them adopting the market prices of the stocks and bonds as the standard measure of valuation, others contenting themselves simply with the physical valuation of the actual property within the boundaries of the state."

IS GOVERNMENT OWNERSHIP IN SIGHT?

Prior to about fifteen years ago, there was little discussion of and practically no demand for government ownership of railroads in the United States. One of the most significant trends of the public thought of today is the growing demand for such ownership, and this, too, notwithstanding the efforts made by the federal government, as well as state authorities, through regulation, to forestall such action. It is not my purpose to set forth the causes for this growing demand. I wish merely to call attention to what I consider some of the salient factors in its evolution.

By the Spooner act, approved June 28, 1892, the President was authorized to purchase from the French Maritime Canal Company, for the sum of forty millions of dollars, all of its property and franchises, including the Panama Railroad. This railroad thereupon became the property of the United States, although retaining its corporate entity as the Panama Railroad Company. From the time of its purchase to the present, it has been practically maintained and operated by the government, and will continue so to be after the Panama Canal is in operation. Although this railroad has been used mainly as a necessary aid in the construction work of the canal, it has been doing an ever increasing commercial business and has been doing it successfully. The ownership and operation of this road by the government has accustomed our people in some measure to such a policy and lessened, in some degree, the hostility thereto which generally existed throughout the country prior to its acquisition.

Another factor in aid of the propaganda for government ownership occurred at Madison Square Garden, August 20, 1906, when the present secretary of state, Mr. Bryan, upon his return from his trip around the world, declared:

I have reached the conclusion that there will be no permanent relief on the railroad question from discrimination between individuals and between places, and from extortionate rates, until the railroads are the property of the government and operated by the government in the interests of the people.

This declaration was made less than two months after the enactment of the Hepburn act prohibiting discriminations as

¹ By John J. Esch, member of the Newlands Investigating Committee. Published in the *Railway Age Gazette*. 56: 9-10. January 2, 1914.

between places and individuals and giving the Interstate Commerce Commission full authority to regulate rates. Notwithstanding the beneficent effects of the Hepburn act and the more recent act of 1910 amending the Interstate Commerce Law, Mr. Bryan has not renounced the position he took in his speech at Madison Square Garden, and he is a most potent factor in the government today. That he crystallized the unexpressed thought of many citizens is doubtless true, although neither the Republican nor Democratic Party has given this policy its indorsement. In this connection, the fact must be noted that the Socialist Party, which believes in government ownership of public utilities, including railroads, is a growing party in the United States, and in the election of 1912 cast for its presidential electors over 900,000 votes.

Another factor which is leading our people along the line of government ownership of railroads and lessening hostility to it because of socialistic or paternalistic grounds, is the growing encroachment by the government in the field of private enterprise. The establishment of gun and ammunition factories and powder plants, and the present interest in the construction of an armor plate plant, are examples in point.

Another powerful factor which is advancing the government ownership propaganda is the increasing demand on the part of municipalities throughout the United States for the ownership of public utilities, such as gas, electric, water and power plants. One municipality, San Francisco, has recently voted to take over a portion of its street car lines.

The present Congress, in legislation which is now pending, exhibits a marked tendency in the direction of ultimate government ownership. The House Committee on Post Offices and Post Roads, in the appropriation bill which it is about to report, recommends the appropriation of \$100,000 for the purchase by the government of railway postal cars, the justification therefor being that such ownership would reduce the cost of rent of cars now being paid by the government to the common carriers. Congressman Lewis of Maryland, in cooperation with the officials of the post office department, has drafted a bill providing for the purchase by the government of telephone lines, the same to be operated in connection with the postal business and under the direction of the post office department. The bill further provides that telegraph instruments be connected with the wires of these companies so that a telegraph business can also be

conducted. This bill, or one of similar purpose, will have the endorsement of the postmaster-general and the President. It is significant that Postmaster-General Hitchcock, in the last administration, made a similar recommendation, but the same did not meet with the approval of the then President.

Most significant of all is the bill which is now being considered in the Senate and House, authorizing the President of the United States to locate, construct and operate a railroad or railroads in the territory of Alaska. Under this bill, the President has the power of detailing officers, hiring experts, letting contracts, constructing wharves and docks, and all other structures necessary in connection with the proposed lines. He is also authorized to receive compensation for the carriage of freight and passengers, and to have these lines "perform generally all the usual duties of a common carrier, for hire." For the above purposes, the secretary of the treasury, upon the order of the President, is authorized, "to borrow on the credit of the United States, the sum of \$35,000,000 or so much thereof as may be necessary, and to prepare and issue therefor, coupon or registered bonds of the United States."

GOVERNMENT OWNERSHIP OF RAILWAYS¹

So far as I can learn, neither in Congress, nor in any other forum, has there been anything like a full review of the arguments likely to be advanced by the advocates and opponents of the measure. In newspapers and magazines, and in an occasional speech, there have been allusions to only a few points on each side. So it is quite an open field for discussion.

Affirmative

In behalf of the proposition, I take it that the arguments may be divided into two classes—governmental and individual. Ownership of railways would strengthen the government:

1st. Because, in times of peace, it would enable the government quickly and secretly to discover frauds on the revenue, in the sale and transportation of liquor or tobacco that has not paid the tax, or in the transportation of smuggled goods.

2d. In the immediate and absolute control of rolling stock

¹ By Judge Charles W. Dustin. Ohio State Bar Association. Proceedings. 36: 72-93. 1915.

and all facilities for mobilization of troops and shipment of supplies in time of war.

As to benefits that may accrue to the individual citizen, through government ownership, it may be argued:

1st. That the government, by reason of its superior credit, would be able to borrow money at a lower rate of interest than private companies, for railway construction, and, its railways being operated for no financial purpose except to pay the expense thereof, and interest on the bonds issued for their purchase, and the creation of a sinking fund for the gradual payment of the principal, and for repairs, improvements and extensions, the element of dividends to stockholders being entirely eliminated, passenger and freight rates would be more reasonable, the cost of living reduced, and general business greatly facilitated.

2d. That rules for the operation of trains would be uniform throughout the country, and not subject to variations or changes according to the whims of superintendents, and would be generally understood by employees and passengers. Moreover, they would be more strictly observed and enforced, increasing the average degree of safety.

And this because:

(a.) Competition being eliminated, there would be no motive to run at a hazardous speed.

(b.) No part of the earnings being necessary for the payment of taxes or dividends, a greater sum could and would be devoted to the better construction of road-bed and rolling stock.

3d. Stations, bridges and embankments, instead of being unsightly, as they now often are, could and would be made more beautiful and artistic (because not subject to taxation therefor) and add largely to the attractiveness of railway property and the general beauty of the landscape.

4th. The stocks and bonds of railways, now held in such vast sums by investors, great and small, which are of uncertain value and subject to frequent changes, would be supplanted by government bond issues for their purchase, which would be steady and certain in value, readily salable, and available everywhere as collateral.

5th. There would be no motive for the manipulation of railway properties for the individual enrichment of officers and directors.

6th. There would be harmony of operation everywhere among the lines that are now jealous and hostile and working at cross-purposes. Connections would be made wherever and whenever it could reasonably be done; and mileage tickets could be issued that would be valid on any line.

7th. Rolling stock could be made from standard patterns in immense quantities and at lowest possible cost, making a saving which would inure to the benefit of passengers and shippers.

8th. In case of special demand on any one or more lines all other lines would be subject to call for rolling stock not then in use. This would apply to passenger and freight traffic, and would be of immense benefit in the moving of crops and the accommodation of passengers for great and unusual occasions.

9th. There would be a uniform system of accounting, and superintendence and other managing service could be combined. Attorneys, advertising and legislative agents, and many officials necessary to private corporations, could be abolished, thereby saving large expense which would not have to be met by passenger and freight rates.

10th. In case of accident on any road-bed, detouring would be a simple affair, because all lines would be subject to orders for the accommodation of any; and the same would apply to wrecking apparatus, supplies, cars and engines.

11th. More men would be employed, and at higher wages; because of the tendency of the party in power to increase and reward its constituency.

12th. All moneys now paid to railways by Post Office Department, for the carriage of mails, would be saved.

13th. Railways would not be hampered by state legislation, which varies according to the political complexion of the general assemblies; Congress alone having power to control.

Even in the exercise of its police power, which is very broad, a state may not run contrary to government regulations.

In *Hannibal v. Hudson*, 95 U. S., 471, it was held that:

Whatever may be the nature and reach of the police power of a state, it cannot be exercised over a subject confided exclusively to Congress by federal constitution. It cannot invade the domain of the national government. . . . It may not, under the cover of exerting its police powers, substantially prohibit or burden either foreign or interstate commerce. . . .

Since the range of a state's police power comes very near the field committed by the Constitution to Congress, it is the duty of courts to guard vigilantly against any needless intrusion.

In *New Orleans v. Louisiana*, 115 U. S., 661, it was held (opinion by Harlan, J.) :—

Definition of the police powers must be taken subject to the condition that the state cannot in its exercise, for any purpose whatever, encroach upon the powers of the general government, or rights granted or secured by the supreme law of the land.

Negative

Considering the other side of the proposition, it may be remarked that there was a time when a constitutional amendment was thought necessary, by many lawyers, to enable the government to take over the railways in time of peace, by purchase or condemnation. From the foundation of the government to the construction of the Panama Canal and the purchase of the Panama Railway, it had never been done, although in a Central Pacific case, hereafter cited, it was held (*obiter*) that the government might "construct" railways. But the right to do so is now generally conceded. The Interstate Commerce Act seems to have broken down the barriers of adverse legal opinion on the subject. And, it having been declared that a railroad is a "post road" (Section 3964, U. S. Rev. Stat., 1878, and 142 U. S., 615), it is now generally believed that intra-state as well as interstate railways are subject to control and ownership by the general government, although no legislation to that end has been enacted except such as applies to the Canal Zone and Alaska.

In the great National Bank case, *McCullough v. Maryland*, 17 U. S., 429, it was held that the government had a right to create a corporation which would assist in the operation and exigencies of government. It would seem to be logical that what it may grant to others to do it may do itself, provided it tends to carry out the functions of government, as for instance in the establishment and operation of post-roads.

Chief Justice Marshall, in his opinion in the bank case, says :

The government, which has the right to do an act, and has imposed on it the duty of performing that act, must, according to the dictates of reason, be allowed to select the means; and those who contend that it may not select any appropriate means—that one particular mode of effecting the object is excepted—take upon themselves the burden of establishing that exception.

In case of *California v. Central Pacific Railroads*, 127 U. S., 1, it was held that :

Congress has authority, in the exercise of its power, to construct, or

authorize the individual or corporation to construct railroads across the states and territories of the United States.

And the right of eminent domain in such cases seems to be clear. In the case of *In re Rughheimer*, 36 Fed., 369, it was held that:

Without doubt Congress, representing as it does, in the House of Representatives, the sovereignty of the people, and in the Senate, the sovereignty of the state, can, whenever it deems necessary, order private property to be appropriated for a public use.

Again, in case of *Ex re Montgomery*, 48 Fed., 900, it was held:

Eminent domain is the supreme dominion the sovereign power has over all the property within its jurisdiction, coupled with the absolute right to appropriate such property against its owner for the promotion of the general welfare, or as public necessity may require. It pertains as a necessary, constant and inexhaustible attribute to sovereignty, and therefore does not depend upon its constitutional recognition or legislative enactment.

The constitutional objection, therefore, being no longer considered serious, other objections may be summarized as follows:

1st. The party in power at the time of the purchase would have the right to appoint the vast army of employees, now estimated at eighteen hundred thousand persons, one-tenth of the voting population of the country, which, with a sure increase of numbers and wages, would give it such an advantage that it would be next to impossible to remove it from power without revolution; and opportunities for graft and corruption would be almost without limit. In the Intercolonial Railroad of Canada even brakemen are appointed on the recommendation of party committees, and the road is concededly run as a party asset and at a loss.

2d. That the quality of service under such conditions would be inferior, and employees would not be subject to the inspection and discipline that servants of private corporations must undergo, and that sinecures would be created and incompetents employed, on account of political influence and for political reward and not on account of skill or merit.

3d. That a system of pensions would inevitably be created to provide for employees of great age or long service, thus removing motives for economy and thrift, and the employment of such energy and ingenuity and attention to duty as will increase efficiency and induce promotion.

4th. That the cost of purchase would be so enormous that the government would be hopelessly in debt for generations to come, crippling its credit in the money markets of the world, reducing the value of its present and future bonds, and leaving us in a helpless financial condition, in case of war, or other great emergency, requiring the speedy use of immense sums of money.

5th. A large number of roads (about half) pay nothing to their stockholders; and in case of floods or great accidents must make up deficits by borrowing money from year to year waiting for a profitable increase.

If the government were the owner, it would have to make up the deficit by some new form of taxation, or increased rates in old forms, or by both, to the distress of the now burdened and always complaining tax-payer. By this process the citizens of populous communities, where railways are profitable, would have to contribute to pay the losses of far-away railways in sparsely settled districts.

6th. New lines and extensions of old ones would not be made to meet the wants of special communities unless such communities were influential in Congress through party leadership. The willingness of local capital to assist in the enterprise would have nothing to do with it. It would depend upon the power of influence at Washington, and the slow process of legislation. Emergencies could not be met by the speedy action of a board of directors. What the delay of legislation means, is indicated in the time now consumed to put through a measure that is indorsed by the President and the party in power.

Railway enterprises for special communities would become a part of the national "pork-barrel," and a matter of trade between members of Congress.

7th. Maximum rates, even of intra-state lines, would not be fixed by legislatures but by congress. Local influence or pressure would amount to nothing, except as the community might be represented by a member of the party in power or a member of large influence.

8th. In case of damages to passengers or the goods of shippers, through negligence, there could be no recovery at law. Compensation or reimbursement would be entirely voluntary, or by special enactment—again dependent on political influence.

9th. All railway properties would be withdrawn from taxation, and local and state treasuries everywhere would fall that much short in their sure receipts, and the deficiencies would have

to be made up by increases on other property, or by new forms of taxation; for all the revenues of the railways, of course, would go into the federal treasury.

10th. The question of safety is open to argument, and must be settled by experience. It may very plausibly be argued that an increased number of employees under government ownership would tend to divide responsibility; and these employees, being appointed for political reasons and not on account of experience and capacity, would be less skillful than employees on private lines, and would be in less fear of blame or discharge; and the menace to the companies of punishment by financial responsibility would be gone. In France, accident statistics show a percentage in favor of the private lines.

Damages, if paid at all, through the finding of a court of claims, voluntarily established, would be paid by the national treasury, instead of by stockholders of the road directly responsible.

Furthermore, it is pointed out that one of the greatest railroad systems of the country operated last year its entire main line and branches without killing a single passenger. There could be no improvement on that degree of care.

11th. Through the Interstate Commerce Commission, and the state commissions, railways have been thoroughly regulated during recent years; so that the old complaints against the discriminations and arbitrariness of railroads have disappeared, and new complaints are promptly heard and disposed of.

Indeed, it is a question if these regulations and prosecutions have not been overdone, and amount to persecutions and harassments; the effect being that no new railways of consequence have been built since 1912, a condition of stagnation in railway construction not known in fifty years. New constructions have been chiefly double-tracking and side-tracks.

If the government becomes the owner of the railroads, it will be in a great measure disarmed. It will not be disposed to criticize itself. The party in power which will be the virtual manager of the railway department, will not encourage complaints or investigations, because of their political effect, and the public will relapse into its old indifference and discouragement as to railway dominance.

12th. The argument from the results of experience is as strong as any. What government ownership may do for us is

problematical. What private ownership has done, with governmental encouragement, is history.

Recognizing the fact that a railroad is the one essential and vital thing to the development of any country, the United States Congress early adopted the plan of railway encouragement by gifts of alternate sections of public lands along the line of proposed construction. States, counties and municipalities caught the fever, and in various ways assisted in the work. The result was the most rapid and wonderful development that ever fell to the lot of any nation, and today about 37 per cent. of the railway mileage of the world may be found in the United States, covering some 258,000 miles.

Now that we have grown and flourished beyond the dreams of our forefathers, and values have multiplied chiefly as a result of the railways, there are those who say that the government was, in its early policy, too generous.

Whether it was or not, can never be demonstrated, because it is impossible to analyze the present worth and determine the proportion due to railway construction; and it is impossible to know whether capital at that time could have been induced, on any other terms, to make such ventures. We only know that the former policy was a success, until hostile legislation and repressive regulations put a stop to railway enterprises.

In 1913 a special campaign against the railways began, and thirteen hundred and ninety-five bills, designed "to regulate railways" were introduced into the several legislatures, and of these two hundred and fifty were enacted into laws. And as these greatly increased the expense of operation, and the apprehensions of capital as to future laws, the discouragement to railway enterprise was natural.

13th. The variable profits of railways, subject so much to weather, crops and trade conditions, would disturb the national budget, and require large overestimates to cover fluctuations of the railway revenues.

14th. The government already has enough to do to look after its army and navy, the post office, the tariff (embracing a volume of details), its internal revenues, the public lands, its banking and currency system, its harbors and navigable rivers, its forestry problems, and its foreign relations, without taking on the additional and special burden of its railways, which would be apt to require more attention than any other single subject.

Legislation would be far more congested than now, even with Congress in continuous session.

The majority of these points, on both sides, will, without elaboration, be regarded as more or less forceful, according to the mode of statement, and the bent of mind of the reader or hearer. But there are others that demand facts and figures to be forceful at all.

Some search for these has been made and the results are presented.

According to the last complete report of the department of commerce of the census bureau, the total value of steam railways and their equipment amounted (in 1912) to the enormous sum of \$16,148,532,502, being $23\frac{1}{4}$ per cent of the total taxable property of the country, and nearly a billion dollars more than the combined national debts of Great Britain, France, Germany and Russia before the war.

This produces annually in the form of taxes more than \$130,000,000; being two and a half times as much as is now paid to the railroads by the government for carrying the mails.

In Ohio the valuation in 1912 was \$619,054,183; which in 1914 had increased to \$684,202,020.

The average rate of taxation in Ohio for 1914 was \$11.17 per \$1,000 which will produce a grand total from steam railways of \$7,642,536 exclusive of the excise tax.

And the county of Montgomery, in which I reside, on a total steam railway valuation of \$6,734,770, receives \$77,445.60, of which the amount of \$38,905.32 goes to the city of Dayton.

These large sums would, in case of government ownership, be lost to the treasuries now receiving them, and appropriations for various public purposes would have to be cut accordingly, or new forms of taxation on corporations and individual property be devised, in order to make up the deficit. When it is considered that this proposition applies to every township and municipality through which any railroad passes, the result is appalling. In many small communities the chief item of taxes, on which the public depends, is from its railways. Assuming that the present estimates for public needs are reasonable, and would have to be maintained, the taxation, to supply deficits would probably in many cases be exorbitant and oppressive.

Take the county of Montgomery, for example. Deprived of the railway taxes, the tax on the remainder of the property would

have to be nearly \$7,000,000 more than now to provide the same revenue.

What Has Been the Experience of Other Governments in the Ownership of Railways?

In Germany and Russia the prime purpose of ownership is for military uses, mobilization and safe and rapid transportation of troops and supplies in time of war. Commercial convenience and the accommodation of the traveling public are a secondary consideration.

In laying out a railway line, towns of considerable size are sometimes left quite to one side, for the sake of straighter tracks, and expedition between the capital and an important point on the frontier.

A good illustration of this is the road between Petrograd and Archangel, laid through a bleak and sparsely settled country to a port on the Arctic sea that is closed by ice a great part of the time.

Such a road is of small value in time of peace, even to the government, and could never become profitable through the carriage of freight and passengers; but in case of other access to the sea being closed, might be of great value in time of war, for a very short season.

And, it is well known, the road between Petrograd and Moscow is an air line, built entirely without reference to the accommodation of intervening towns; and with the main purpose of providing a direct and speedy transit for troops and supplies, in time of war, between the two great cities of the Empire.

As to whether national railways are, and would be, well conducted, there will doubtless be differences of opinion.

The rational way to determine the question, it seems to me, is to consider the general policy of a government railway and its natural tendencies.

We, in America, are so accustomed to the benefits of competition and the terror of legislation, that it is hard to realize what would be the effect of having railways which are independent of criticism, and largely exempt from state laws.

The following results would seem naturally to follow:

1st. Equipment would be inferior as to beauty and comfort, and trains would be fewer and more crowded. Those who have traveled in Germany will recall how train attendants so crowd

passengers that every available seat must be occupied, before any additional car is put on for an overflow.

2d. Speed would be reduced (without loss of patronage) on the ground that it is expensive and dangerous. This might be considered an advantage.

3d. All rules would be general and fixed, and not subject to variance by local authorities to suit individuals, organizations and localities, for special occasions or unusual circumstances.

4th. Excursion rates would be abandoned.

These considerations may not be so important, however, as the matter of expense.

Do Government Railways Pay?

I have been to some pains to examine the facts from reports of the following countries: Russia, Prussia, France, Switzerland and Brazil.

As to Russia, it would hardly be necessary to look at the reports to determine the question negatively.

It is sufficient to look at the map to see that profit is impossible. The Siberian Railway is a great enterprise for the development of that country, and the protection of the government; but in the nature of things, for generations to come, it cannot pay.

The latest statistics (1910) show that the state railways of Russia were operated for 70 per cent. of the revenues, while the private railways of that country were operated for 59 per cent.

In Prussia, so densely populated and productive, government railways do pay (or did until the opening of the war). But they are made to pay by high freight tariffs and low wages. Freight rates are forty per cent. higher than in America and wages fifty per cent. lower. Expenses of operation are reasonable.

In France, some (not all) of the railways are owned by the government. The road from Paris to the Riviera, which is the best equipped and makes the best time, is a private corporation. Official figures issued in December, 1914, show that there were in France in 1913, 5,611 miles of state owned railways and 19,654 miles of private lines. The total receipts of the two government lines were \$65,500,000, and the operating expenses were \$5,800,000, leaving \$6,700,000 as net revenue. As the fixed charges of the two roads amounted to \$26,000,000, the state was obliged to appropriate \$19,300,000 out of the public treasury to clear up the deficit. The operating expenses of the private lines was 59.6 per cent., and of the government lines 85 per cent. of their receipts.

Switzerland owns its railways and runs them economically and has some attractive features for travelers. For instance monthly tickets are sold at a low price, good on any line, in any direction, and may be used as often as the holder chooses during the month designated. But that plan at the same rate evidently would not do in a large country, where the distances are great and travelers numerous. The roads would be swamped with patronage.

In Brazil the private railways are run for 67 per cent. and the state railways for 89 per cent of their operating revenues.

In most of the countries having state railways, there is a showing of profit from operation; but it is impossible to tell whether the expense account includes betterments and new equipment, or even repairs. There is no pretense in the published reports that it includes interest on the construction or purchase bonds. Nor is there any way of determining what the original cost price was. But, placing a medium estimate upon the cost, the net revenues, except in Prussia, fall far short of paying the interest. So, almost all of such railways may be said to be a continuing loss.

The Cincinnati Southern Railway

The brightest example, of what may be done with a publicly owned railway, is the Cincinnati Southern Railroad, owned by the city of Cincinnati, and leased to a private company, for operation.

Since the first six years of its existence, it has been run at a handsome profit, and the rental is paying off the bonds issued for its construction, at the rate of \$600,000 per annum. By 1933, the entire debt for the original construction of the road, with interest, will have been paid, and the city will be in receipt of an annual rental of \$1,105,000 from the road, for application upon its general bonded indebtedness.

Moreover, the road itself, considered as a piece of property has so increased in value, that, if sold now, the proceeds would probably be sufficient to pay the entire debt of the city of Cincinnati, including the bonds originally issued for its construction and for terminal improvements. So, that what was originally a scheme to increase the general prosperity of the city, without much hope of profit from the investment itself, has turned out to be a great speculation.

THE EXTENT OF GOVERNMENT OWNERSHIP¹

Archiv für Eisenbahnwesen, the official publication of the Royal Prussian Ministry of Public Works, has recently issued its annual compilation of the railway statistics of the world, showing the mileage, capitalization and the proportion of government-owned and privately-owned lines in each country for the year 1913, with comparisons with previous years. It is stated that, although most of the figures are derived from official sources, it has been necessary to depend in part on unofficial reports. Railways owned by governments are listed as state railways, whether they are actually operated by the government or by private companies. The mileage figures for 1913 are as follows:

<i>Europe</i>			
Country	Total	Private	State
Germany	39,831	2,998	36,833
Austria-Hungary	28,872	5,293	23,579
Great Britain	23,572	23,572	.....
France	31,992	26,350	5,642
European Russia	38,873	14,167	24,706
Italy	11,021	1,878	9,143
Belgium	5,508	2,787	2,721
Netherlands	2,035	915	1,120
Switzerland	3,039	1,328	1,711
Denmark	2,356	1,132	1,224
Norway	1,932	288	1,644
Sweden	9,056	6,175	2,881
Europe, exclusive of the countries already named	18,299	13,397	4,902
Total	216,386	100,280	116,106
<i>America</i>			
Country	Total	Private	State
Canada	29,468	27,687	1,781
United States	256,823	256,823	.....
Mexico	15,932	3,509	12,423
Central America	2,016	1,655	361
Peru	1,728	670	1,058
Brazil	15,615	8,849	6,766
Chile	3,981	1,988	1,993
Argentina	20,759	17,249	3,510
America, exclusive of the countries already named	10,324	9,996	328
Total	356,646	328,426	28,220

¹ Railway Age Gazette. 59: 3-4. July 2, 1915.

Asia

Country	Total	Private	State
Russian Central Asia and Siberia.....	9,943	3,100	6,843
China	6,158	6,158	.....
Japan, including Korea.....	6,866	1,968	4,898
British East Indies.....	33,850	4,362	29,488
Asia, exclusive of the countries already named	9,668	6,605	3,063
Total	66,485	22,193	44,292

Africa

Country	Total	Private	State
Egypt	3,716	790	2,926
South African Union.....	11,016	3,125	7,891
Colonies	8,098	4,169	3,929
Africa, exclusive of the countries already named	4,856	3,043	1,813
Total	27,686	11,127	16,559

Australasia

Country	Total	Private	State
New Zealand	2,906	30	2,876
Victoria	3,693	25	3,668
New South Wales.....	4,120	167	3,953
Australasia, exclusive of the countries al- ready named	11,413	1,393	10,020
Total	22,132	1,615	20,517

Summary

	Total mileage		State		Private	
	1913	Gain	1913	Gain	1913	Gain
Europe	216,386	2,256	116,106	1,590	100,280	666
America	356,646	9,990	28,220	5,841	328,426	4,149
Asia	66,485	1,498	44,292	152	22,193	1,346
Africa	27,686	1,002	16,559	613	11,127	389
Australasia	22,132	385	20,517	1,448	1,615	1,063
Total	689,335	15,131	225,694	9,644	463,641	7,613

Of the total mileage of the world for 1913—689,335 miles—private companies owned 463,641 miles, or 67 per cent, and governments owned 225,694 miles, or 33 per cent. In 1912 the private railways owned 68 per cent. The government railways gained one per cent by increasing their mileage by 9,644 miles, while the mileage of private companies increased only 7,613 miles.

However, an analysis of the statistics given for the various countries shows that this gain by the state railways represented the absorption of existing lines rather than greater activity in

railway construction. For example, 4,478 miles of line were added to the government total in Mexico, and 1,002 in Argentina, without any increase in the total mileage of the country. In Australasia there was also a gain of 1,448 miles for the government lines by the absorption of private lines, although the total mileage of the country increased only 385 miles. The privately-owned lines, therefore, actually increased their mileage by construction, 12,000 miles, of which about 6,500 miles was offset by the acquisition of lines by the governments.

It will be noted that, in respect to length of lines, outside of North and South America, government ownership greatly predominates, but that the privately-owned mileage in the United States, 256,823, greatly exceeds the mileage of all the government-owned roads in the world. It is somewhat surprising, however, to find that the greatest increase in government mileage is in North and South America, due to the absorption of private lines in Mexico and Argentina. Even outside of the United States, however, private ownership is greatly predominant in America. Excluding our 256,823 miles, there are in this hemisphere 71,603 miles of private railways, against 28,220 miles of government railways. In only two countries in this hemisphere, Mexico and Peru, is government ownership the predominating policy, and in Peru the roads are operated by companies.

In a majority of the countries of the world, also, private ownership of railways continues to prevail. Of 75 nations and colonies for which statistics are given in this compilation, 42 have more private than government mileage, while 33 have more government mileage. While in 26 countries the entire railway mileage is privately owned, in only 7 are all the railways owned by the state. These are Serbia, Bulgaria, Natal and four German colonies in Africa. In Europe state ownership predominates in only 10 out of 21 countries.

All the railways of the United States, Great Britain, Spain, China and Rhodesia are in the hands of private companies, and most of those in Canada; in France four-fifths of the mileage is privately-owned, in Sweden nearly two-thirds and in Brazil and Argentina company mileage is greatly predominant. In Germany, Austria-Hungary, Russia, Italy and Japan government ownership is the dominant policy.

Of the total railway mileage of the world for 1913, over 37 per cent. was in the United States. The total increase for the year was about 15,000 miles, of which 5,019, or about one-third,

was reported for the United States, although this figure for this country is undoubtedly too high. The increase for the world was less than the gain reported in 1912 or 1908.

The total railway capitalization of the world as reported by this publication was \$60,222,036,784. In this is included, however, over \$19,000,000,000 as the capital of the railways of the United States, which erroneously includes all the duplications due to inter-corporate ownership. The Interstate Commerce Commission's figure for 1913 is \$15,330,131,446. With this correction the world's total in 1913 stood at \$56,350,804,230, an increase over the preceding year of \$1,848,250,556. The average capitalization per mile for the world was \$82,313, as against \$65,861 for the United States. The average for Europe was \$70,656, and 18 countries are reported as having a greater railway capitalization per mile than the United States. It will be noted that while this country has 37 per cent of the world's mileage, only 27 per cent of the total capitalization is chargeable against the railways of the United States.

A STATISTICAL COMPARISON BETWEEN - AMERICAN AND GERMAN RAILWAYS¹

It may be stated as a rather singular fact that the railroads of the United States of America, although they had a total length of 249,852 English miles in 1912, exceeding almost sevenfold the 37,757 miles of German railways, had only one and one-half times the passenger traffic but about six times the freight traffic of German roads; yet the net revenue attained by the American railroads since 1908 has suffered a continued decline, until, figured per mile, in 1912, it was less than half as great (\$3,003 against \$7,137) as that earned by German railways. This is true, moreover, not only for the entire American system, but in somewhat lesser degree for the better situated railroads of the north-eastern group of states, whose net has been reduced so greatly through the high taxes paid to individual states and to municipalities, that in 1912 it was only about two-thirds the net of German roads per mile (\$4,945 against \$7,137).

From the standpoint of the science of transportation, it will be of value to compare the railway conditions in America with

¹ By W. A. Schulze, Privy Counsellor of Finance, Berlin. Translated and annotated for the "Railway library and statistics," 1915, from "Zeitung des Vereins Deutscher Eisenbahnverwaltungen," Numbers 46 and 58, 1915.

those in Germany in recent years, before the outbreak of the present world war. . . . American statistics give most of the returns in two forms, once combined for the entire Union, and again divided for the separate "districts," namely the eastern district, which comprises the northeastern states from the Atlantic Ocean to Lake Michigan and the Mississippi; the southern district, comprising the southeastern states, and the western district, taking in the western states. The eastern district is by far the richest portion of the Union in traffic, since it alone contains almost half the entire population as well as half the entire passenger and freight traffic, yet takes up in area only one-eighth the Union. It seems, therefore, advisable to compare also this eastern district with the returns for the German railways in the years 1908 to 1912. . . .

The entire system of railways in the United States in 1912 had an operating length of 249,852 miles; since the population was 95,545,336 and the area was 2,973,890 square miles, there were 382.4 inhabitants and 11.90 square miles to every mile operated. The railroads of the eastern territory, with its 42,560,622 inhabitants and 328,361 square miles, had an operating length of 64,284 miles and on the average 662.1 inhabitants and 5.11 square miles per mile of road. Against this the standard gauge railways of the German Empire, with its 66,145,082 inhabitants and 208,905 square miles, had an operating length of 37,757 miles, (of which 35,541 was state and 2,216 was private mileage) equaling 1,752 inhabitants and 5.54 square miles per mile operated. The net work of German railways was thus about equally thick compared with area but had almost three times as dense a population as the roads in the eastern district of the United States.

United States railways are entirely private. Of the German standard gauge roads only 5 per cent are private, 95 per cent being government. The entire operated mileages compare as follows:

	America	Germany
1908.....	230,494 miles	35,624 miles
1912.....	249,852 miles	37,757 miles

Since Germany has a greater prevalence of second or more tracks, the entire trackage was:

	America	Germany
1908.....	254,193 miles	49,496 miles
1912.....	279,219 miles	53,148 miles

The invested capital of American railroads amounted to:

	Stocks	Bonds
1908.....	\$7,373,210,000	\$ 9,394,330,000
1912.....	8,622,400,000	11,130,130,000

and hence for the two countries the total capital compares thus:

	America	Germany
1908.....	\$16,767,540,000	\$3,872,870,000
1912.....	19,752,530,000	4,394,410,000

The net revenues, that is the excess of revenues over expenses thus compared as follows:

	America	Germany
1908.....	\$724,380,000	\$169,800,000
1912.....	870,270,000	269,300,000

as a result of which the return upon total capital invested was:

	America	Germany
1908.....	4.32%	4.51%
1912.....	4.41%	6.29%

In reality however this return upon capital in America was considerably smaller, since in the figures above given for operating expenses the taxes to states and municipalities paid by American railroads are not included, while the taxes and municipal payments of German roads are included in operating expenses.

Through this taxation of American railroads the returns of capital invested as given above are reduced in 1908 by 0.51 points and in 1912 by 0.61 points so that as actual returns upon the capital only the following percentage comparisons would be proper:

	America	Germany
1908.....	3.81%	4.51%
1912.....	3.80%	6.29%

For the five years, 1908 to 1912, the aggregate return in America was only 20.19 per cent against 28.04 per cent in Germany, or, averaged per year, 4.04 per cent against 5.61 per cent. Thus America presents a return 38 per cent less favorable than Germany's. It is noteworthy, too, that this performance for America in comparison with Germany is becoming worse year after year, for the return achieved by American roads was less favorable than the German in each year 1908 to 1912 by 18.4; 23.8; 28.0; 60.7, and 65.5 per cent.

Figured per mile of line the actual net of the railroads was:

	America	Germany
1908.....	\$2,732	\$4,766
1912.....	3,003	7,137

the German net per mile thus more than doubling the American in the last year.

Passenger and Freight Traffic in America and Germany

For a comparison of the performance of American and German railroads as to passenger and freight rates it seems advisable not to take as a basis American roads as a whole, but rather those of the most important district, namely the eastern territory. With 64,284 miles the railroads of this district showed the following results in passenger traffic in 1912; passenger revenue, \$281,602,503 or \$4.381 per mile; 15,745,175,861 passengers carried one mile, or 257,255 passenger miles per mile of road; an average journey for each passenger of 25.64 miles; total number of passengers carried, 619,385,412 or 9,635 passengers per mile; an average revenue per passenger of 45.5 cents, and per passenger mile of 1.782 cents.

With 37,757 miles the German railroads had the following results in passenger traffic in 1912: Passenger revenue, \$224,719,558 or \$6.148 per mile; 24,818,333,020 passengers carried one mile or 678,385 passenger miles per mile of line; an average journey of 14.23 miles; total number of passengers carried, 1,743,535,918, an average of 46,177 passengers per mile. Their average revenues were 12.86 cents per passenger and 0.91 cents per passenger mile.

From this it may be seen that the average fare per passenger mile in America is nearly double that in Germany (1.782 cents against 0.910 cent), while the average fare per passenger journey was about $3\frac{1}{2}$ times as high (45.5 cents against 12.86 cents), since the average journey per passenger in America was 25.64 miles against only 14.23 miles in Germany. In spite of payment of these higher average fares in America the average passenger revenues per mile there are only \$4.381, in contrast to Germany's \$6.148; the number of passengers carried per mile, furthermore, in America is only 9,635 against 46,177 in Germany while the passenger miles are only 257,255 per mile of line in America against 678,385 in Germany. The development of passenger traffic on American railroads since 1908 has been much less marked and

therefore much less profitable than in Germany. For the two countries the following passenger revenue per mile of line and average fare per passenger mile can be made:

	America	Germany
1908.....	\$4,138 and 1.750 cent	\$5,128 and 0.929 cent
1912.....	4,381 and 1.782 cent	6,148 and 0.901 cent

As may be seen from this the average receipts from passenger traffic of American roads per mile of line rose between 1908 and 1912 only \$243, or 5.85 per cent while Germany rose \$1,020 or 19.89 per cent. The average revenue per passenger mile on the other hand, rose in America from 1.750 cent in 1908, to 1.782 cent in 1912, or 1.83 per cent while in Germany the rate fell from 0.920 cent to 0.901 cent of 2.65 per cent.

The average journey of passengers in America in 1908 was 24.77 miles and in 1912, 25.64 miles against Germany's average in two years of only 14.13 and 14.23 miles. From these figures one may infer that American passenger travel has been extraordinarily increased in price and burdened by much too high passenger fares for all short distances, and that the less prosperous portion of the public, especially working people have been just about forced to see themselves obliged to make their short journeys not by railroad but with cheaper means of transportation, the street cars, steamships, on bicycles or on foot.

And to this must be added that, taken as a whole, in America express trains and ordinary trains do not travel in a single instance faster or more frequently than on German railroads; on the contrary—if one leaves out the extraordinarily heavy passenger business on the two railroads between the great cities of New York and Philadelphia—on the most important roads in Germany for the most part there are maintained more and swifter fast trains and passenger trains. Way-stations for boarding and leaving the trains, in particular, follow each other much more closely in Germany, and therefore trains can be used much more easily for shorter journeys.

The fact may be cited especially that for every inhabitant in the eastern district of the United States in 1908 there were only 14.88 railway journeys of 24.77 miles each; but in 1912, although the population had increased about 16 per cent, there were only 14.55 journeys per inhabitant, each 25.64 miles long. In Germany, however, there were 21.62 journeys per inhabitant in 1908, each 14.13 miles long, whereas in 1912 there were 26.36 journeys

averaging 14.23 miles long. In the third and fourth classes alone in 1908 there were carried 1,251,000,000 people (including the military at an average fare of only 0.82 cent per mile, each an average of 13.62 miles; the figures for 1912 reached 1,609,000,000, also at 0.82 cent per mile, each an average of 13.75 miles: so that in the two lowest classes, utilized principally by the less prosperous inhabitants, 1912 showed a gain of 358,000,000 passengers or 28 per cent over 1908.

Time, students' and workmen's weekly tickets as well as workmen's round-trip tickets comprised a full third of this journey in third and fourth class on the Prussian-Hessian state railways; to be exact, 317,000,000 in 1908 and 42,000,000 in 1912, an increase of 125,000,000 or 39 per cent in four years, who paid an average of only 0.34 cent and 0.36 cent per mile. How scanty appear to be the figures for the entire United States with a mileage seven times as great as Germany's, since in 1912 American roads hauled only 998,000,000 persons a distance of 33.18 miles each, against 890,000,000 in 1908, an average distance of 32.86 miles! There was accordingly in the four years a growth of 108,000,000, or 12 per cent.

Freight traffic on American railways displays in rates per ton mile the direct antithesis to the passenger fare comparison with German tariffs. The American average rate per ton mile in 1912 was only about half as high as the German, but on the other hand the number of ton miles in America was correspondingly much larger.

According to statistics for 1912 freight traffic in the eastern district of the United States (with 64,284 miles of road) and on the German railroads (with 37,591 miles) compared as follows:

Turning to the development of freight traffic since 1908 the average freight revenues per mile of road and per ton miles may be compared as follows:

	America	Germany
No. of tons carried (U. S. ton .908 metric ton)	1,108,075,722	674,433,620
Ton miles, total.....	134,947,240,000	41,716,880,000
Ton miles, per mile of line.....	2,131,165	1,109,758
Average haul, miles.....	121.87	61.85
Freight revenue, total.....	873,338,982	519,227,398
Freight revenue, per mile.....	13,585	13,902
Average revenue, per ton.....	78.9c.	76.9c.
Average rate, per ton mile.....	9.647c.	1.245c.

Turning to the development of freight traffic since 1908 the average freight revenues per mile of road and per ton mile may be compared as follows:

America	
1908.....	\$12,201 per mile, 0.650c. per ton mile
1909.....	11,978 per mile, 0.652c. per ton mile
1910.....	13,893 per mile, 0.645c. per ton mile
1911.....	13,212 per mile, 0.646c. per ton mile
1912.....	13,585 per mile, 0.647c. per ton mile
Germany	
1908.....	\$11,673 per mile, 1.273c. per ton mile
1909.....	12,119 per mile, 1.269c. per ton mile
1910.....	12,829 per mile, 1.277c. per ton mile
1911.....	13,751 per mile, 1.258c. per ton mile
1912.....	13,902 per mile, 1.245c. per ton mile

The freight revenues per mile received by American railroads, according to these figures, were rather unsteady between 1908 and 1912; in Germany on the other hand they went steadily higher from year to year. In Germany, for instance, 1911 and 1912 brought the highest figures per mile, whereas America attained the highest in 1910. Compared with 1908 the freight revenues per mile in America rose \$1,384, or 11.34 per cent against a growth of \$2,229, or 19.10 per cent in Germany. The average revenues per ton mile in America fell only 0.46 per cent; in Germany they fell 2.20 per cent.

It is noteworthy moreover, that in 1911 and in 1912 the freight revenues per mile in Germany were \$539 and \$317 higher than in America, yet the ton miles carried on American railways per mile in 1912 were 2,131,165, against 1,109,758 on German roads, 47 per cent less. The average revenue per ton in America was 78.9 cent and in Germany almost the same, or 76.9 cents. The average revenue per ton mile on the contrary was only 0.647 cents in America, whereas in Germany it was almost double, 1.245 cents.

For American railways as a whole (with 249,852 miles) the average revenue per ton and per ton mile was somewhat higher, for in 1912 there were carried 1,844,980,000 tons and 264,080,740,000 ton miles having a revenue of \$1,968,598,630, which brings an average revenue per ton of \$1.066 and per ton mile of 0.744 cents. The average haul was 143.44 miles against 121.87 miles for the eastern district alone.

Compared with American average revenues per ton mile and their ton mile performance per mile of line, the German rail-

roads evidently not only perform a smaller task than do the American roads, but they also receive for their performance, figuring numerically, much higher freight rates per ton mile. Yet a judgment of the tariffs in the two countries cannot be arrived at so simply, since it is very difficult to weigh together as to their effect on revenue the great differences which exist between the freight rates based on distance and the classification of freight in America and in Germany; and since in America freight rates for each railway are fixed particularly according to the conditions of the locality or the individual state, as well as by the competition against other shippers, which must be maintained, while under several special circumstances, as in the case of contests of interested parties with the railroad, rates are approved by the railroad commissions only after proof of their exact propriety and reasonableness.

It may be concluded that to answer the question whether and to what degree the freight rates on American and German railroads correspond to the services, one must weigh not only the average revenue per ton and per ton mile, but also the average distance the ton is hauled and the average load per freight train. In this respect without doubt American railroads can rely upon a great advantage over German railways, for in 1911 and 1912 the average distances per ton were 122.68 and 121.87 English miles or double that of the German roads. And so far as concerns the amount of freight to be shipped, the American roads (eastern district) in 1911 reported 279,140,000 train miles and 130,834,000,000 ton miles; and in 1912, 271,560,000 train miles and 134,847,000,000 ton miles; so that each freight train hauled on the average a load in these years of 468 and 496 American tons, equalling 425 and 450 German tons. On German railroads, freight trains hauled an average load of only 214.6 and 218.0 tons in these years. German railroads have afforded an advantage in the shipping of freight in so far as the number of freight trains operated by them is relatively double that on American railroads, and the German freight trains with their much lighter average weight are operated on swifter schedules and are available for a larger number of small stations between large cities.

IMPORTANT WORK AWAITS NEWLANDS COMMITTEE¹

The Congressional investigation was suggested by President Wilson in a message to Congress in which he said:

The transportation problem is an exceedingly serious and pressing one in this country. There has from time to time of late been reason to fear that our railroads would not much longer be able to cope with it successfully, as at present equipped and co-ordinated. I suggest that it would be wise to provide for a commission of inquiry to ascertain by a thorough canvass of the whole question whether our laws as at present framed and administered, are as serviceable as they might be in the solution of the problem. It is obviously a problem that lies at the very foundation of our efficiency as a people. Such an inquiry ought to draw out every circumstance and opinion worth considering, and we need to know all sides of the matter if we mean to do anything in the field of Federal legislation.

Senator Newlands' Statement

Senator Newlands has issued the following statement with regard to the scope of his Committee's work:

It is the desire of the Committee to give ample opportunity to all interested in or having any relation to the subject matter of the proposed inquiry to express their views. But the Committee would like early notice of the subjects to be discussed by the various persons appearing before it, so that the hearing can be, as far as practicable, in orderly sequence as to subjects. The purpose of the Committee is to hear regarding government regulation and government ownership the opinions of economists and publicists of eminence, representatives of the Interstate Commerce Commission, the National Association of State Railroad Commissioners, state railroad and public utility commissions, representatives of the railroad executives and labor organizations, representatives of farming organizations, and farmers, shippers, and bankers, representatives of chambers of commerce, and other important business and industrial organizations.

Scope of the Inquiry

The Committee is seeking advice upon seven points as follows:

1. Whether the Interstate Commerce Commission is overloaded and whether its jurisdiction should be confined to questions of discriminations, rebates, and rates, its jurisdiction over other subjects, such as valuation, safety inspection, etc., to be turned over to some other body or bureau to be created by law.
2. Whether it is necessary to make any change in the organization of the Interstate Commerce Commission with a view to

¹ Greater New York. 5: 3-4. November 20, 1916.

prompt and efficient action; whether it is feasible to increase the number of commissioners and to permit them to divide in several departments for the consideration of cases, and if so whether there shall also be consideration in bank and also whether there shall be appeals from decisions in the department to the commission in bank.

3. Whether such departments of the interstate commerce commission shall sit in Washington, or be assigned to definite traffic areas somewhat after the manner of the judicial circuits, and whether in the latter case there should be provision for sitting in bank in Washington or for some central body in Washington with the duty of hearing appeals and directing the procedure of the departments.

Railroad Credit

4. Whether under the present system the credit of the common carriers is assured with a view to their securing the moneys needed for necessary improvements and extensions in the interest of the public, and at reasonable rates of interest. Whether government regulation of the issue of securities is advisable, and if so whether it is to the interest of the public as well as the carriers that this regulation should be exercised by the national government, and whether it should involve merely publicity or absolute control of the issue of securities. Whether concurrent jurisdiction of the nation and the states to control such issues is in the interest of the carriers and the public. What will be the field of operation for the state railroad commission in the interest of the public if the control of securities and the control of rates is vested in the Interstate Commerce Commission? Whether and to what extent within a period of five years it will be necessary to enlarge the facilities of the common carriers in the interests of the public, and whether the present system of government regulation is such as to insure the credit of the carriers with a view to their making additional necessary expenditures.

5. What is the effect of dual regulation on the part of the states and the nation of the rates of carriers? What, if any, contradictions does it involve, and what, if any, discriminations does it involve as between states and localities?

May Plan Wage Laws

6. Whether or not any regulation is feasible of the wages

and hours of employees of common carriers and whether or not it is advisable, in the interest of the public and with a view to maintaining an uninterrupted commerce between the states, to take any further legislative action regarding the adjustment of disputes between the carriers and their employees and regarding strikes and lockouts.

7. Whether any national legislation is required as to the organization of carriers in interstate commerce in the nature of national incorporation, permissive or compulsory, or in the nature of national holding companies, under which state corporations may be controlled and unified in their operations, in the interest of interstate commerce, and what form of national legislation for the incorporation of carriers or for holding companies owning the stock of state companies is desirable. How will national incorporation affect the police powers of the states over railroads operating within their boundaries? Will it be advisable, as in the case of national banks, for the national government to prescribe a uniform rule for the taxation by the states of railroad properties and securities?

Under consideration of government ownership the committee will seek advice upon four points:

1. The practical results of government ownership, both as to efficiency and economy, where actually practiced.

2. Whether government ownership is actually compatible with our system of government and what its effect will be on our governmental institutions.

3. Whether a system of government ownership will suit local needs.

4. A practical method of securing government ownership, whether by purchase or condemnation of properties, or by purchase and condemnation of bond and stock issues, or otherwise.

What the Railroads Want

The railroads will urge the committee to recommend federal incorporation to free them from onerous restrictions and conflicting state laws. They will be represented before the congressional committee by the railway executive advisory committee. The railroad brotherhoods are strongly opposed to compulsory arbitration or to any legislation which would restrict their action in the case of strikes.

AFFIRMATIVE DISCUSSION

RAILWAY EXPERIENCE OF GERMANY¹

The argument submitted by the cabinet to the Prussian parliament in 1879, along with bills for the nationalization of the railways, is probably the most important document in railway history. It represents the best thought of Bismarck and his cabinet and all they have gathered from the chambers of commerce and hundreds of books, pamphlets and addresses that had been issued on the subject during years of earnest discussion. A few quotations will give the reader some idea of the weight and thoroughness of this famous document.

The cabinet said:

"The inconveniences caused by the private management of railroads in consequence of the existence of a number of different enterprises of doubtful solidity and restricted working capacity; the abuse of their privileged position by their managers; the oft-recurring resistance to reforms of public utility; the complication and for the most part arbitrary differences among the various administrative and working arrangements; the intricacy of the tariffs; the quarreling and extravagant expenditure accompanying the bitter competition existing among such a number of corporations, have altogether caused the widespread injury to the public welfare that is inseparable from an extended private management of railroads.

"The attempts to bring about reform by laws have shown the futility of hoping for a satisfactory improvement through legal measures, without trenching materially on established rights and interests."

"State ownership is necessary," argued the cabinet, "to attain unity and economy under conditions in harmony with the public welfare and to secure direct attention to public interests which do not permanently find sufficient furtherance and protection where the railroads are in the hands of private corporations whose

¹ By Frank Parsons. *Arena*. 37: 113-20. February, 1907.

object is gain. . . . The inadequacy of private management and state supervision becomes daily more obvious."

The cabinet dwelt at length upon the advantages of unity, the waste of having fifty separate railway managements, etc. Large savings in official salaries would result from unity of management. The army of employees in the tariff and accounting offices could also be reduced one-half. "The reasonable utilization of cars" was interfered with "by the multiplicity of owners, and the working capacity of the rolling-stock greatly reduced in consequence," one-third of the travel being made with empty cars. The waste in haulage by circuitous transportation was also shown. "Freight is carried over roads exceeding in length by 100 per cent the shortest routes."

"But," said the cabinet, "the union of the railroads in the hands of one private enterprise would be absolutely inadmissible. Although the disadvantages and dangers of an unsystematic division and wasteful competition would thus be avoided, to place the complete monopoly of all means of transport in the hands of one enormous profit-seeking corporation would be antagonistic to every public interest concerned, as will be apparent to all. Already in those countries where private railroad management is the rule, and where the technically and economically justified process of absorption by the powerful corporations of the smaller and less important railroads prevails, their course hitherto, the dangerous influence which these corporations have acquired over the whole public existence, the reckless pursuit of the profits of their monopoly and their chartered rights within the districts they serve, and the impotency of government supervision compared with their far-reaching, well-organized power, controlling all interests, together cause the gravest apprehensions for the welfare of the country, and even for its political independence."

"Only the union of complete ownership and unrestricted management in the hands of the state can fully secure the fulfillment of the task devolving on the government with regard to the direction of railroad matters. Only by the adoption of this system can the economical advantages of united management be obtained without the monopoly of transportation comprising the advancement and protection of the interests of the community. The great advantages of complete unity in the management and operation of the railroads are so necessary to the economical in-

terests of the country that the only question left is whether a monopoly by the state or by private corporations is to be regarded as the most advantageous form of unity. If a private monopoly, as just described, is wholly incompatible with the proper protection of public interests, but would render all business requiring transportation dependent on the interests and views of a private enterprise, then a government monopoly, one single transportation establishment conducted by the state for all the railroads of the country, appears to be the only possible form in which complete unity of operation can be accomplished by the protection of the interests of the community."

"The railroads are public highways and can only be left to unrestricted private control so far as public interest permits. The very nature of a public highway requires that its use must be secured to everybody on equal terms."

"It is the duty of the government to see that the people have fair rates and equal treatment; to protect the public against arbitrary, fluctuating, complex and unjust tariffs; to demand safe transportation for the public and ample facilities to guard the customs duties against neutralization by railway concessions to foreign goods. For all these reasons the government must control the railroads, but the conflict of interest between the private railways and the public makes such control very difficult. The companies seek profit and often try to deflect the law instead of giving cordial support and full effectiveness to government regulation in the public interest. On the other hand it is a very delicate question how far the government has a right to exert control for the public good against the financial interests of the railways."

"More than all," said the cabinet, "the principle of equality, the impartial treatment of all shippers, is endangered by the operation of railroads by private corporations. The principles of the publicity of the rates and the equal treatment of all shippers, which are embodied in the railroad legislation of all countries, are liable, as experience has shown, to be circumvented on account of the competing interests of railroads, and also by individual interests which have influence with the managements. The granting of these secret advantages in transportation in the most diversified ways to individual shippers, and in particular the so-called rebate system, is the injurious misuse of the powers granted to railroad corporations. It renders government control

of the rates impossible, makes the competition between the different lines, as well as that of shippers dependent on them, dishonorable and unfair, carries corruption among the railroad employees and leaders more and more to the subordination of the railroad management to the special interests of certain powerful cliques. It is the duty of the government to oppose this evil, to uphold the principle of the equal treatment of all shippers, and to enforce the legislative regulations on this subject. The importance of this problem is equaled only by the difficulty of its solution. It suits the interests of the railroad proprietors to favor large shippers in preference to the smaller ones, and, by means of secret favors of all kinds, to divert the most important shipments from the competing lines. The opportunities of securing secret favors to particular shippers are so manifold that their effectual lasting hindrance by means of the state supervising power is impossible. Rebates on freights may be made through a second or third party by means of the secret interposition of agents who are appointed for the purpose of regulating and securing the business of a certain competing route through the mediation of the foreign railroads concerned, as well as by a prearranged connivance in admitting or allowing fictitious or unfounded claims, etc., and so may be covered and withdrawn from public as well as official control."

"The organization of a joint-stock company does not prevent the possibility of the operation of a railroad being brought into a condition of complete dependence on some other industrial undertaking, nor does it insure that the directors of a private railroad company shall not be interested in a series of other enterprises whose successful operation is dependent upon their business relations with the railroad, so that the management of the road may be directed and governed, not so much by its own interest as in the interest of some other business, often enough opposed to that of the road. Against such an organization, which, by reason of its abundant means, and by effective channels, often leads astray and corrupts public opinion, even the influence of the government is powerless, the principle of equable treatment of all railroad shipping interests becomes an empty form and legislative regulation nothing but a meaningless phrase."

RAILROAD REGULATION¹

Overcapitalization may be regarded as the greatest evil of the present railroad system.

In 1901 the capitalization of the railroads amounted to \$11,688,177,991, and has since been materially increased.

At this time about \$5,800,000,000 consisted of funded debt which, it may be fairly assumed, paid a large portion of the actual cost. The capitalization at that time amounted to \$61,000 per mile, which is probably 50 per cent more than the real cost of the roads.

The stock of the roads amounted at this time to some \$5,800,000,000.

In the prosperous railroad year of 1900, less than half the stock received any dividend at all.

In 1897 only 28 per cent received any dividend.

The investigations of the railroad committee last winter showed that the capitalization of Minnesota roads amounted in 1904 to \$343,611,135, or an average of \$46,000 per mile against some \$273,448,971 in 1901, which was only \$38,000 per mile.

This shows an increased capitalization of \$70,000,000 made in three years with an increased mileage in the state of only 475 miles.

At a maximum figure of \$40,000 per mile, such mileage should not have cost over \$19,000,000.

This leaves an apparent valuation of \$50,000,000 added to the indebtedness of the railroads, without any corresponding increase in real value of assets in Minnesota.

The capitalization of the railroads in the state therefore apparently increased from \$38,000 to \$46,000 per mile, or an increase of 20 per cent upon which the producer is supposed to pay profits.

To pay interest on this fictitious stock at four per cent would require an increase of two million dollars in freight rates in the state of Minnesota.

That the same system of over-capitalization has prevailed in other parts of the United States, is indicated by the fact that the total indebtedness of all roads doing business in the state of

¹ By William D. Washburn, Jr.

Minnesota increased from \$1,494,000,000 in 1900, to \$2,184,000,000 in 1904.

This is a total increase of \$689,000,000 in three years, or a tremendous increase of indebtedness without a corresponding increase in assets.

This amount should have built nearly 17,000 miles of road, which in fact was considerably more than all the new mileage built by all the railroads in the United States during that time.

Over-capitalization is too apt to be considered as one of those funny jokes by which the innocent are fleeced in Wall street. As a matter of fact, it is one of the most sinister evils that overshadows the economic life of the nation.

Watered stock may not pay interest today or tomorrow, but it remains constantly in existence as a means by which unfair rates may be kept in force after they have become extortionate.

The cost of carriage may be decreased from 25 to 30 per cent, as it has during the past twenty years, but the freight rate remains practically the same.

As long as the railroad apparently pays from six to eight per cent upon its stock, public criticism is allayed.

For a clever people, it has taken the American people a long time to discover that 6 or 8 per cent upon watered stock is 12 or 16 per cent upon the real value of corporation property.

Watered stock is a contrivance, subtle, dishonest and unjust, not alone to living citizens, but likewise to their descendants, whose inheritance and enterprise are thus covered with a perpetual mortgage which automatically absorbs the profits to be made by generations yet unborn.

On the assumption that only 50 per cent of all stock paid dividends in 1900, this leaves \$2,500,000,000 of the railroad stocks that are purely fictitious. It will take \$100,000,000 of additional net freight earnings to place this stock upon a 4 per cent basis. Rates will naturally be maintained or even increased in an effort to make earnings upon this fictitious capital.

The issuance of watered and worthless stock should be strictly prohibited by the state in behalf of the citizen who is paying unjust rates to meet the interest upon the property that does not really exist. The cost of railroad carriage decreases yearly by the adoption of improved methods of transportation. Is it unreasonable to demand that the public share the benefits thus derived by a substantial decrease in railroad rates as occasion warrants?

PUBLIC OWNERSHIP OF RAILROADS: SAFETY OF TRAVEL¹

While at the present time the German state railways carry nine hundred fifty million passengers a year, compared with less than seven hundred fifty millions carried by the railroads in the United States, a comparison on this ground is not fair, inasmuch as the average journey in Germany is only about one-half as long as the average journey in the United States. The comparison should therefore not be based on the total numbers of passengers, but upon passenger miles. If we do that, we are more than fair to the railroads of this country, because, inasmuch as the traffic is far heavier on the German roads than the average traffic here, the liability to accident for the same number of passenger miles should be greater there. The carrying of nine hundred fifty million passengers over 33,000 miles of road means a very much denser traffic than the carrying of seven hundred fifty million passengers over 210,000 miles of road. Furthermore, it must be admitted that the risks of accident are at least proportional to the density of traffic, or, perhaps, even increase as the square of the density; we, therefore, on two equally well managed roads would expect to find the greater number of accidents happen on the roads with the denser traffic, or the one carrying the greatest number of passengers per miles of track.

Table XVI.

*Comparison Between Number of Persons Killed and Injured for
1,000 Million Passenger-Miles on American and
German Railways*

	U. S.	Germany
Number of passengers killed in collisions and derailments	14.3	2.2
Total number of passengers killed.....	22.5	9.1
Number of employees killed in collisions and derailments	24.4	1.2
Total number of employees killed.....	141.2	42.6
Number of passengers injured in collisions and derailments	254.3	35.8
Total number of passengers injured.....	439.2	45.3
Number of employees injured in collisions and derailments	199.0	14.8
Total number of employees injured.....	2,808.0	111.5
Total number of people killed.....	407.7	91.4
Total number of people injured.....	3,614.0	184.2

¹ By Erik Oberg. Public. 11: 401-3. July 24, 1908.

For this reason a comparison of passengers killed and injured per a certain number of passenger miles is more than fair to our American railroads. If we make such a comparison we will find that while in Germany only one passenger is killed in collisions and derailments for one thousand million passenger miles (average for ten years), in the United States fourteen passengers are killed in collisions and derailments for the same number of passenger miles. The number of the injured under the same conditions are in the proportion of one to thirteen. The total number of persons killed on the German railroads compared with the total number killed in this country is in the proportion of one to four for equal number of passenger miles. The total number of injured is in the proportion of one to fourteen for the same number of passenger miles. This comparison is between the German average for ten years, and the conditions on American railroads for the year ending June 30, 1905. If we, however, compare with the year 1900-1901 in Germany, which was particularly one of great accidents, and one where the German average was greatly exceeded, we still find that for each passenger killed there, for a certain number of passenger miles, between six and seven were killed here in collisions and derailments. The proportion of those injured was one to seven under the same conditions. A detailed statement is given in Table XVI, where a comparison based on one thousand million passenger miles has been computed. It cannot be argued that the results there put forth are explainable for this country on account of higher speed or heavier traffic. The speed on all the German main lines equals or exceeds the ordinary speed of the trains of our railway lines, and as for traffic, few American railroads have as heavy a passenger traffic as the thickly populated German Empire offers its railroads. In reference to Table XVI it may be said that although the accidents were heavy in the United States in the year taken as example (1905), the comparison is still more than fair to our railroads, as the year selected for Germany shows that the number of passengers killed and injured in that year in collisions and derailments was *more than three times the average number for the preceding ten years*; the number of passengers injured under the same conditions was nearly three times as great; and the number of accidents in general in that year was higher than the average for the German roads. Hence, a perfectly fair comparison for American roads is offered in Table XVI. It must, of course, be admitted that it is very

difficult to determine a basis for comparison of the fatalities to employees on account of the fact that in such a comparison the passenger as well as the freight service enters. Supposing that we compared the accidents to employees on the basis of the ton-mileage in Germany being about one-ninth the ton-mileage in the United States in the years compared. We would still have the proportion of employees killed in train accidents in Germany and the United States for the same number of ton-miles as about 1 to 6.3, and the proportion of those injured as 1 to 4.5.

This comparison is a deplorable one to make. "What is the use of our boasted development, if we cannot attain it except at such a cost of human life? Why is it that American railroads prove so much more unsafe to their patrons, as well as to the employees of the road?" asks one of our railroad journals. And the same journal proceeds:

We do not believe that it is because American railway employees are less capable, or naturally more reckless. It seems more plausible that the explanation is rather to be found in the lack of true system in our train movements, due, perhaps, in the last instance to the financial influence which governs our transportation system, creating, as it does, a spirit of irresponsibility. Whether the fact that German railroads are public property, run in the same manner as our government runs the postal service (with a great deal less political pull, to be sure), has anything to do with the greater safety of German railroads is difficult to assert, although it seems likely that this must be one of the favorable influences. At any rate, it is safe to say that private ownership, when accompanied by the past and present irresponsibility of railway managers, has proved fatal to the safety of passengers in the United States, and we earnestly hope that conditions will turn for the better, now that public opinion is aroused more than ever, and proper safeguarding is demanded for the life and limb of both passengers and employees. No other railway reform is more urgently needed. One important step was taken when the hours of duty of railway employees were shortened, but it is difficult by legislative measures to cure evils of this kind. What we need most of all is an aroused public opinion, and that somebody be held responsible in each case for this horrible killing and maiming.

The figures previously stated should be considered if we are in doubt about the efficiency of governmental as compared with private management. Let us study the painstaking efforts of government-owned railroads in Europe, particularly in Germany and the Scandinavian countries, for the safety of the public. Let us wake up out of the sleep through which we have become so used to having hundreds of people killed yearly by railway "accidents," that we have commenced to look upon this matter

as the natural accompaniment of railroads. Let us realize that the necessity for railway accidents would be less imperative if the lives of our citizens were valued more than dividends on watered stock, arrogance in high office, and an all powerful monopoly, which, instead of being governed, has tried to govern the country, and, in fact, has succeeded in governing many individual states.

The German railway authorities make every effort to make life safe on the railways, for passengers as well as for employees. Thorough investigations are made of every wreck, little or big, to find out the causes, and prevent their reoccurrence. Not infrequently someone is held responsible and punished for their occurrence. Exhaustive testimony is taken with the thoroughness of a criminal trial, the idea of the state railway managers being that the detailed history of railroad accidents affords the best basis for taking precautionary measures for their avoidance in the future.

A German railway official, having traveled in the United States, in a well put statement charged many of our accidents to lack of punctuality and a general lack of systematic working of American railroads. Our train dispatching system, with a single responsible dispatcher for a large portion of a system, he considered out of date; and he stated his belief that our railway system now, with introduction of mechanical signalling, etc., could make use of the more modern German system of running trains. He also found that at the stations the whole responsibility of the train movements was not placed in a single individual, as in Germany, and that this lack of systematic working also was a prolific cause of accidents.

There are, however, some other important causes for railway accidents in this country which this German observer either did not realize or else did not call attention to. Among these may be mentioned the overworking of employees; the existence of train rules which cannot well be lived up to, and which employees are not expected to live up to; the attempt to carry on a double track business on a single track road; general lack of initiative and fear of new departures; and in particular, too much adherence to that provincial American trait which prevents learning lessons from the outside, and profiting by the progress elsewhere.

The safety of other state railway systems, besides the German, is not less noteworthy. The Swedish state railroads at present

carry more than 16,000,000 passengers a year. The total number of passengers killed by accidents not caused by their own carelessness, has been eight for a period of forty-seven years. The number of passengers injured during the same period, the injuries not being due to personal carelessness, has been sixteen.

On the Danish state railways only one passenger is either killed or injured for each 3,500,000 passengers. In the United States one person, in 1905, was either killed or injured for each 70,000 passengers.

THE RAILWAYS AND LEGISLATION¹

Railroad officers representing great transportation systems in a country which has nearly half of the world's railroads have been attacking, before committees at Washington, the bills past last week by the House. They say that these bills, if enacted and enforced, would bankrupt many railway corporations. Some of them have declared that the proposed legislation would eventually compel government ownership and operation. Their complaints and criticisms are not wholly unwarranted. The bills are not in all respects what they should be. They should be amended.

But these gentlemen should be asking themselves why such legislation is proposed, and why it has the support of so many of the American people; why there is a popular demand for severity in the treatment of railroads by Congress and federal executive officers; why public sentiment approves legislation that may compel government ownership, and why so many are coming to see in such ownership the only possible cure for intolerable conditions.

There is an answer at hand, as these gentlemen know, in the revolting and exasperating recent history of the New Haven company. It is an answer growing more distinct and emphatic every day.

We are beginning to know what was done by the officers and directors of that company. The widows and orphans who invested in the company's stock all that stood between them and the poorhouse know, to their cost, and can place the blame where it belongs. But what was done by state authority to protect them? Did the railway commission of any New England state,

¹ Independent. 78: 472. June 15, 1914.

or New York's commission, ever interfere to inquire as to the work of the scoundrels and the faithless trustees, and to prevent what has taken place? Was there any protection to be found in the legislatures? Is it surprizing that those who suffered and many who sympathize with them may be thinking of government ownership as of something greatly to be desired?

The officers who have been testifying at Washington should soberly review the list of the New Haven offenses. They should recall the juggling of the books, the burning of records, the purchase of franchise amendments by bribery involving the payment of \$1,200,000 for bunches of paper "worth ten cents a pound"; the expenditure of \$11,000,000 for a branch worth only \$5,000,000, and an increase of this investment to \$35,000,000 for a road operated at an annual loss of \$400,000; the payment of \$20,000,000 for a trolley system worth not more than \$8,000,000, but valued highly by a senator of the United States; the destruction of books that showed who had owned this property; the purchase of other trolley systems, and of steamboat lines, at prices which suggest corruption on both sides; the shifting of railroad shares which gave a coal merchant in the little city of Meriden a profit of \$2,700,000; the destruction of books relating to this curious transaction; the employment of political state bosses at generous annual salaries, and many other things that brought almost to bankruptcy this old company, serving one of the richest railway territories in the world.

Is there not enough in the record of this foul activity, unrestrained by state or other authority, to suggest a resort to government ownership? Had the officers who have been testifying at Washington any knowledge of what was going on in New England? It may be that they had none. But would it not have been to the advantage of the entire railway industry of the United States for them and their honest associates to inquire about such things, and to check the offenders' course? We suggested some months ago that there ought to be a vigilance committee, to guard and restrain the industry's black sheep. It is not too late now to appoint one.

What does the organ of the railways, an old and conservative journal, say about these things? We quote from the *Railway Age-Gazette*:

The great danger is that the disclosures regarding the conduct of the Mellens, the Yoakums and the rest of their ilk will cause the passage of

more radical legislation than the conditions justify. If excessively drastic legislation shall be past, we trust that there will be no hypocritical wailing from Wall Street about ignorant public hostility toward railways, and about the public being misled by demagogues. The buccaneers in Wall Street and the fools and cowards in Wall Street who let the buccaneers work their wills are the chief authors of such legislation.

It is a toss-up whether the demagogues or the highbinders of finance are doing the more to bring all the details of business under the regulation of public officials. Eugene V. Debs, Morris Hillquit and Upton Sinclair think that they are the real leaders of the Socialist movement in this country. They take themselves too seriously. The real leaders of Socialism in this country are such men as Charles S. Mellen, B. F. Yoakum, and the directors of the New Haven, Frisco and other roads who are too crooked, cowardly, indolent or incapable to perform the duties of their positions.

These are not the remarks of a radical journal moved by hostility. They are given to the public by a faithful friend and representative of railroad interests. We commend them to the consideration of the railroad officers who have been testifying at Washington.

THE RAILROADS AND THE NATION¹

The application for an increase of five per cent in railroad rates which is now being considered by the Interstate Commerce Commission involves questions much more difficult and momentous than those which appear upon the surface. It involves the whole relation between the railroads and the nation. It involves the success or failure of the policy of administrative regulation of the most important public utility in the country. It involves the policy of public ownership as an alternative to public regulation. The Interstate Commerce Commission was constituted, and its powers have been gradually increased, in order to mediate between the railroads and the nation, in order to convert the privately owned railroads into a satisfactory public transportation agency. It was assumed that the conversion could be made without doing any injustice to the owners of railroad securities, and without losing any of the advantages which have resulted from private ownership and operation. After the experience of the past eight years, can this assumption continue to be accepted, and if not, what are the possible alternatives? Is regulation to be relaxed and the owners of railroad property

¹ New Republic. 1: 11-12. November 21, 1914.

allowed a more decisive voice in its management? Or is the division of responsibility and the conflict of interests to be wiped out by the nationalization of the railroads, and their management exclusively as a public utility?

The friends of the railroads have themselves raised these questions by the presentation of their case to the Commission. When the previous application for a five per cent increase was pending, they reiterated with the utmost emphasis the assertion that the real choice lay not between acquiescence or refusal, but between acquiescence and ultimate government ownership. They declared that unless the net return upon the capital invested in railroads was increased, they could not raise the money needed to supply the country with an adequate transportation service. Undismayed by this threat the Commission allowed the railroads only a fraction of what had been claimed as an indispensable minimum. The decision was accepted under protest, and the application renewed as soon as the war presented a plausible excuse. If it is again refused, how about the reality of the advertised alternative of an increase in rates or a collapse in credit and service—of a larger return on capital, or eventual government ownership?

Surely the alternative is coming to have an increasing amount of reality. The owners of the railroads will have to be trusted with a larger amount of discretion in the management of their property or the property itself will have to be purchased by the nation. Whatever the justifiability of the treatment which they are now receiving, the treatment itself is bound to injure their ability to perform their work. It is not merely that they are running a business the expenses of which are steadily increasing, without being able to exact corresponding increase in receipts. It is not merely that since the beginning of the parcels post they have been underpaid by the government for the carriage of the mails, and left almost defenceless against the demands of their employees for higher wages. What is even more serious from the point of view of the railroad manager is the extent to which the bonds are being fastened upon him. The Interstate Commerce Commission is seeking supervision over every phase and every detail of railroad management, and these increasing powers are being granted on the assumption that private management cannot be trusted to act in the public interest except under the influence of coercion. Neither does the increasing activity of the

Interstate Commerce Commission protect the railroads from the equally or more disconcerting supervision of state commissions and legislatures.

The intelligent public opinion of the country is consequently faced by the question of deciding whether administrative supervision has succeeded in converting the railroads into public servants without injustice to the owners of the railroad securities, and without any sacrifice of the advantages of private management. We do not see how this question can be answered in a manner favorable to existing policy and methods. The owners of the railroads are possessed by a profound conviction that they are being unwisely and unfairly treated, and that the end of the prevailing process of regulation will be a diminution in efficiency and a confiscation of property. Yet in spite of the comprehensive and drastic nature of the regulation, the railroads remain an object of public suspicion. The Interstate Commerce Commission is convinced that the unregulated phases of their management are still characterized by grave abuses. It can advance strong arguments in favor of increasing supervision so that its authority will comprehend the causes of accidents and the issue of securities. Regulation, so far from having diminished the amount of friction has perhaps increased it.

Railroad men feel sure that as properties the railroads are being bled white. But their grievances have not disarmed public opinion. It is unwilling to return to the railroads a freer hand and to acquiesce in an increase in rates or privileges, unless some assurance is obtained that the existing privileges and revenues are being properly used; and such an assurance seems remote at a time when so many flagrant cases of railroad mismanagement continue to be uncovered. We are not able or willing to check the increasing tide of regulation. Yet we cannot accomplish by means of it what needs to be accomplished. The supervision, while it is succeeding in slowly improving the structure of railroad rates and in doing away with many abuses of management, is succeeding equally well in impairing the ability of the railroads to perform their positive and vital functions. The resulting situation combines many of the disadvantages of private and public ownership with very few of the advantages of either.

PROSPECTS OF STATE OWNERSHIP IN ENGLAND¹

That nationalization of our English railways is bound to come I have long believed. That it will come pretty soon, I fully expect. Judging by the evidence before the Royal Commission now sitting, the great majority of the great manufacturers and traders of the country are opposed to it, the Leeds Chamber of Commerce among the number. But the captains of industry have few votes; the railway servants alone can vote them down; the trade union vote would simply swallow them. And I have no doubt which way the working classes, who expect the bottomless purse of the state to provide simultaneously higher wages, shorter hours, easier work and lower fares, would vote.

For my own part I shall greatly regret the change, which I believe to be inevitable. Not only because—

Men are we and must grieve when even the shade
Of that which once was great has passed away,

but because we shall lose, in my judgment, more than we can gain. I admit we shall gain something—a good deal perhaps. English business admittedly had grown slack—take the iron and engineering trades for instance—twenty years ago. Rule of thumb methods, antiquated machinery, neglect of cost accounting, and so forth, held undisputed sway. English business was effectually awakened by the severity of foreign competition. English railways are not exposed to foreign competition, and their methods still need modernization. The railway profession nowadays needs the best brains and high scientific training. Our railways mainly recruit their headquarters staff from the rank and file. The headquarters staff of the civil service are the pick of the very best brains of the country. I cannot doubt that nationalization would *at the outset* lead to more scientific and, therefore, more economical operation.

I will concede another point and a big one. No nation has yet solved the problem of satisfactory state control of a private railway system. Our railways used to be pretty well controlled by competition. But competition is dying before our eyes. There remain the Board of Trade and the Railway Commission. No-

¹ By W. M. Acworth, Chairman of the London Tramways Company. Published in *Railway Library and Statistics*, 1914, p. 182-5.

body, I assume, supposes that they control the railways. The Royal Commission now sitting has shown no signs so far of having begun to think out a scheme of adequate control, or even of appreciating that such a thing is required. France used to have, under the name of *Comité Consultatif*, a really competent body of experts controlling its railways on the commercial side. But of recent years political pressure has greatly increased the membership of the committee till it has become an overgrown debating society, whose debates are not primarily conducted from the point of view of the public interest. As for America, high hopes were entertained not long since of the Interstate Commerce Commission. But its recent record has disappointed even its most fervent admirers. And at this moment the commission, having done its worst in impairing the credit even of the strongest companies, is occupied in eating with what grace it can a decision on the most important question ever submitted to it, which it pronounced after twelve months' inquiry as recently as last July.

INTEGRATED AMERICA¹

Anyone who is trying to get Congress to adopt a national project is likely to find himself balked by the intensity of local feeling. In its worst form this particularism appears as the pork-barrel, but that is not its only form. States' rights, provincial patriotism, sectional interests, not only stand in the way of an adequate military program; they obfuscate issues like conservation and the control of industry. This local-mindedness is cut across by a still graver kind of disunion—the divisions of class and clique. No one supposes that any measures now within the realm of statesmanship can obliterate the hostility and rivalry of sections and groups. Hamilton with all his genius achieved merely a working union, not an ideal union. What we have to aim at is plans that will wed larger and larger masses of Americans to the federal government, and allay the worst forms of suspicion which hinder national action.

Without a railroad system Americans scattered through so immense a territory could not cooperate at all. We should be a collection of deaf and dumb communities, much like China or

¹ From article by Walter Lippmann. *New Republic*. 6: 65-7. February 19, 1916.

Russia, in which the mass of people would never think or act effectively as a nation. The railroads, as their publicity men tell us, have become the chief source of American unity. They reach out into the most obscure village and destroy the sense of distance. When a man wishes to take a vacation and "get out of America," he hunts up a place not on the railroad. When a little town secures connection with some trunk line it feels as if it had been absorbed into the nation's life.

Yet just because the railroads play so large a part in welding us together, they are also capable of setting us against one another. The power to make rates is the power to discriminate between communities. Over this power a tremendous struggle goes on. Some sections are well served, others poorly, and as a result the railroads are a source of great sectional rivalry in the United States. States' rights has taken on a new intensity owing to the effort of different sections to regulate railroads in their own interest. There has developed a tangle of local conflicts due to the fact that state commissions try to bend the management of railroads in the interests of a particular locality. This rivalry exists because American railroads are not operated as a unit but as competing systems. The effect of the conflicts is to disorganize American political thought, for they align business men against each other, and deepen particularist as against national habits. The pork-barrel is in many ways a minor sign of this deeper disunion.

Because we cannot operate our railroads as a unified national service, we cannot undertake any thorough military preparedness, we cannot coordinate our industrial resources, we cannot really control business in the interests of the nation. There can be no thorough plan of economic development because the government has no positive leverage upon it. Not only reformers but the wiser railroad men are beginning to see that the railway problem is becoming constantly more "impossible." They recognize that rate-making is a public function, yet it can never be satisfactory or tolerably fair under existing conditions. It is plain that you cannot make an equal rate for two systems one of which has long hauls and the other short. The same rate is almost certain to be excessive for one road and too small for the other. Under a unified system this difficulty would not arise, since the excess earned by one part could be applied to the deficiencies of another part.

The same problem arises in regard to wages. The railroads today face the most powerful unions in America. A prosperous road may be able to meet their demands, while a poor road cannot. Moreover, these unions, which represent the skilled workers, are becoming so great an interest that private railway management cannot cope with them. It is fairly clear that wage-making on the railroads will have to become a public function. But wages can never be regulated fairly for competing railroads. The roads must operate as a unit if equal wages are not to prove an impossible burden.

With rates and wages, safety appliances, kinds of service, and what-not regulated by the government, private railroad initiative has all but disappeared. What remains is the worst feature of private management—the fact that the railroads are not one national system over which burdens can be distributed according to needs. And the responsibility is divided. Neither the railroad executives, nor the government, nor the unions have that essential of good administration—the combination of responsibility with power.

This profound disorganization at the very heart of our industrial life is the opportunity of the statesman who wishes to integrate America. The political leader who has the vision to see that to nationalize America he must first nationalize the railroads will be the man who has taken a step towards realizing Mr. Roosevelt's intentions. To transfer to the federal government the management of the nineteen billion dollars of capital in the country's most vital industry would do more than any other thing to make us a nation. The interests of the national government would then be unmistakably superior to those of the states and private interests. The government would then have the instrument and the power for controlling and stimulating business. By its control of rates and railroad development it could coordinate industry, and there would be created a very large class of bondholders, employees, shippers, executives, whose immediate interests were national rather than local.

The obvious objection is that our government is too inefficient to operate so great an industry. To be sure it already controls all vital operations, exercising power without responsibility, but the real answer is that efficiency grows from practice and need. Give a great enough number of people a vital interest in railroad efficiency, and if you have any faith in the American character

you must believe that they will develop that efficiency. Railroad nationalization would make efficiency a moral issue in American politics, because the evils of inefficiency would be felt in every corner of the union. Only in some such great enterprise can Americans be expected to learn their most needed lessons: that a successful democracy must have a powerful government, that it must be a government which touches their lives if they are to cherish it, that it must be the custodian of interests so great that inefficiency and waste and the lack of public spirit are crimes against the state. It is hard to see how Americans can develop national responsibility in any other way than by assuming it.

POSSIBILITIES OF GOVERNMENT RAILROAD CONTROL¹

Of all quasi-public industries, the railroad is, perhaps, the greatest cause at the present time that is operating to prevent equal opportunities in modern industry. The industries of the country are more dependent upon the railroads than upon any other one condition, and the way in which these are managed is the greatest power to create or destroy democracy in industry.

In the private management of quasi-public industry the one object kept before the mind of the manager is always "How will I secure the greatest returns?" He is always thinking about what the traffic will bear. If a certain rate will not bring in the greatest amount of money, such a rate cannot be fixed. It is the same in considering the effect of any contemplated improvement in the service. If it does not appear that it will increase the revenue, it is not to be considered. Life-saving devices are not to be thought of if they do not assure a money return. This is well illustrated in the case of the automatic coupler. The railroads would not adopt it till after a quarter of a century of agitation and only when they were finally compelled by Congress. It was a question of social welfare, and the railroad is operated for the purpose of making money, and accordingly social welfare is a secondary consideration.

Under government control it is reasonable to expect that in the operation of the railroad the effect on national welfare as well as the mere earning capacity of the business would be con-

¹ By John B. Phillips. *Arena*. 34: 458-61. November, 1905.

sidered. It is quite possible to imagine cases in which the money return might in some measure be sacrificed for the benefit of the nation as a whole. This is the way the post-office is managed at present. It is better that there should be a slight deficit and that it be made up by general taxation than that the rates of postage should be raised to make the post-office, a self-supporting institution. One of the interesting cases illustrating this point is that of the local *rundreise* tickets in Switzerland. In that country it is possible to get a ticket good on all railroad and steamboat-lines, limited to two weeks or one month, for ten and twelve dollars respectively. It is possible that this price does not pay the expense of carrying the passenger, but the prosperity of that country is largely dependent upon the amount of foreign travel and therefore the importance of selling tickets so as to encourage this is the same as cheap postage in the United States.

At present in the United States there is little thought of the social effects that may be produced by freight-rates. In adjusting the rates at which various commodities are to be carried, it is wise to consider the social importance of the commodities. For carrying some things the rate should be very low, while in the case of others whose social necessity is not so great the rate can be kept higher. It has been pointed out by some thinkers that there are commodities that are so indispensable to the welfare of the population that they should be supplied at a minimum of cost. The government has provided some things that are of transcendent importance to the welfare of the community. Among these is a supply of pure water. It may be that there are other commodities that should be provided at the lowest possible cost on account of their importance and among them might be mentioned coal. It has been argued that coal should be transported at a very low price.

With government control of the transportation industry, the rate for carrying this commodity could be fixed in some measure according to its social effects. It could be placed very low and the deficit made up by a higher rate on some other commodity. If the rate for carrying coal had been fixed so low that it would not yield any profit to the railroad companies, they would not have bought up the coal-lands in Pennsylvania at so high a price in the hope that they were to make fortunes by carrying the

coal to the seaboard. It is a matter of common knowledge that the railroad companies in the anthracite regions purchased these lands at more than they were worth in the hope that by monopolizing the outlet from the mines they would be able to control the price of coal. They paid so much for the lands that some of the companies have not been able to pay any dividends to their stockholders. The attempt to get money for dividends by various methods of curtailing expenses in the mines is what led to the disastrous coal-strike. All this trouble might, perhaps, have been avoided if there had been government control of rate-making and a rate for the transportation of coal placed at so low a figure that there would have been little or no profit to the companies in securing a large business in carrying that commodity. Between managing a quasi-public industry like the railroad to secure the largest financial return and managing it to secure the greatest social welfare, there seems to be an irrepressible conflict.

It is important that the people should make their influence felt in the control of those forces that have most to do with their social and industrial welfare. At the present time when quasi-public industries are wholly under private control, it is difficult to do this. Devices to prevent loss of life have not come as rapidly as the public has thought they were needed. Frightful railroad accidents entailing great loss of life are of frequent occurrence. There ought to be some way in which public sentiment might make itself felt in cases of this kind without being obliged to await the pleasure of a corporation in so important a matter as that of safeguarding the lives of the people.

Government control of railroads might be such as to guarantee that all possibilities of industry along the line of the road would have a chance to be developed. Under the present system of privately managed roads it is possible for the manager to ignore completely the desires of certain localities and take no steps to secure the development of industry there. A railroad manager may be anxious to sell the stock of his company at a high price and after a few years leave the road entirely in the hands of other owners. To do this he will curtail operating expenses and cut down the amount of money for improvement and thus allow the road to deteriorate, but will meantime be able to pay larger dividends to the stockholders and thereby raise the

value of the stock. Persons anxious to develop industry along the line are made to suffer for the sake of the speculator in railroad stock.

In modern private industry it can hardly be expected that the affairs of a large corporation will be so managed as not to give some patrons an advantage over others. The railroads are immense corporations competing with each other to secure business and earn dividends for their stockholders. More than in anything else the railroad manager is interested in the quotations of the stock of his company as they appear from day to day in the Wall street reports. A good showing there is what assures him his position and also his standing in the railroad world.

Pressed as such men constantly are by fierce and relentless competition, they are always on the alert to secure new business or to increase old. Giant corporations are endeavoring to secure special rates from the transportation lines. Some of the combinations are stronger than the others and can therefore bring a greater pressure to bear on the railroad companies. The result has usually been that the larger corporations have succeeded in getting special reduced rates from the transportation companies. In this way they have been able to starve out their competitors who have been compelled to pay higher rates for their transportation.

It is well known that many trusts are in large part the creation of discriminating railroad rates. In the histories of the Standard Oil Company much of the strength and prosperity of this combination is attributed to its ability to secure rebates from the railroads. No independent refiner can compete with the Standard if he does not have the privilege of shipping his oil at as low rates as this company. The rebate is said to be still in existence and in cases where it is not the rates are so fixed as to favor the Standard.

A FEDERAL RAILROAD BOARD¹

TO THE EDITOR OF THE SUN: Railroad stockholders do *not* control the policy or elect the directors. All they care about is dividends. They never think of attending corporate meetings and generally don't even send in their proxy. There are thousands of them and they are strangers to each other. The whole management, control and policy is in the hands of a few insiders. Any railroad stockholder will tell you that. The average railroad stockholder is a deadhead in the enterprise, a nonentity, a moribund quantity, and, worst of all, he doesn't care. He no more controls the policy and elects the directors than the flowers that bloom in the spring. He is for profit only and is not even ornate. All that the railroad wants is his money and that is all they get. I am a railroad stockholder myself and a substantial one, and hence I feel privileged to abuse my unknown associates, who have been as derelict as I have been. "Lex" says that recently in one railroad the stockholders turned the management out. True enough, but that was after the company was ruined. The stockholders slam the stable doors after the horses have disappeared. "Lex" says that the president is elected by proxies. That was the theory, but it broke down almost in the very beginning. One great fact is clear, namely, that railroad stockholders do not count, and that inside coteries elect the directors and run the railroads as though they owned them.

A second great fact is that the public will not tolerate much longer this mode of choosing railroad directors. John Finlay was right when he said, "Democracy, beginning in the Mississippi Valley, is seeking now a perfect impersonal transportation machine." "An impersonal machine!" That means a great deal. It means that the public shall control. The present machine is intensely personal. Like the old turnpike system it has served its purpose, but is outgrown and has got to go. In fact, it has become so bad that it simply cannot obey the law. Only the other day the Supreme Court of the United States refused to interfere with fines aggregating over \$200,000 imposed on the New Jersey Central for illegal discriminations in favor of a coal company.

¹ By William W. Cook, General Counsel of The Mackay Companies. A series of letters to the New York Sun.

And a few years ago the New York Central was heavily fined for rebates on sugar shipments. Nor is the Pennsylvania Railroad free from guilt. Railroad competition has degenerated into criminal competition—competition in giving criminal rebates and secret discriminations. The great, fundamental trouble is that these directors represent no one but themselves. They don't represent the stockholders nor the investors nor the public. Graft also has crept in, but the situation is ugly enough without going into all of that. Private control is the source of our troubles.

Some great change is impending. The railroads are writhing under "regulation." Public facilities are cramped. Investors are dissatisfied. Money cannot be had. The public is hostile to the "control." The government has seized control of railroad income by controlling rates, without assuming any responsibility for financial results. The time has come for the government to take full control and assume the responsibility as well as the power. Under the Monroe Doctrine we would not let Europe furnish a policeman and would not furnish one ourselves. But that would not do, and now look at Cuba, Santo Domingo, Hayti and others. The American government having assumed power over the railroads, is now bound to assume responsibility, name the directors and assure a fair income to investors.

Of course all railroad men and bankers will oppose this. Men do not easily give up a power, and for fifty years they have had it. But a change is impending. The railroad oligarchy has got to go, and the only question is the order of its going. Now, when the railroads are knocking at the door for relief—now is the time to put out the usurpers. There will be no peace until the public has control.

April 3, 1916.

CIVITAS.

TO THE EDITOR OF THE SUN: The present system of railroad regulation and control is breaking down. Congress is about to consider how it should be recast or whether government ownership is preferable. The elements of the problem are as follows:

Money—Mr. Prouty of the Interstate Commerce Commission recently said that regulation would break down, if at all, because investors would not purchase railroad securities. One billion dollars a year is required for necessary railroad extensions, equipment, improvements and terminals. At present the investors will not furnish the money. They prefer industrials, foreign

loans, state and city bonds. Even in these flush times of easy money the railroads cannot get the money. Government ownership of course could furnish the money.

Excessive Regulation—Some forty-five state commissions are hammering away at the railroads and have almost ruined them. Practically everybody believes that it should be stopped. Of course government ownership would stop it.

Discrimination and Rebates—These would cease with government ownership.

Wasteful Competition—President Ripley of the Atchison, Topeka & Santa Fe recently pointed out that every night five passenger trains start from Chicago to Kansas City on five competing railroads, and yet one is enough for the traffic; and that six trains start from Chicago to Omaha and five to St. Paul, where one would suffice. Four twenty hour trains pass between New York and Chicago daily. All of them are dangerous to life. All economists now admit that real railroad competition is a thing of the past. In fact, railroad competition at present is criminal competition, competition in giving secret rebates and discriminations with a dash of graft in them. Every few weeks there is a government prosecution and a railroad conviction and a heavy fine. A short time ago the Supreme Court sustained fines aggregating over \$200,000 on the Jersey Central alone. Government ownership would end this, but federal incorporation and a federal railroad board naming the directors would equally well end it. Wasteful and criminal competition would cease in either case because the public would have control. Furthermore, railroad monopoly would become public monopoly. For instance, the New York Central Railroad's monopoly of freight trackage in New York city, now about to be riveted down, to the unwise exclusion of trunk lines terminating in Jersey City, would be controlled by this federal railroad board and many ambitious designs thwarted.

Wasteful Regulation and Litigation—New York state alone in 1914 expended \$3,792,884.74 on its two commissions. Forty-five states have similar commissions. Then there are railroad officers, employees and clerks who do nothing but attend commission hearings. Then there are the lawyers. The annual expense of all this would pay the interest on a vast sum, which might better be invested in railroad needs. Government ownership would eliminate this.

Conflict Between the Railroads and the Public—When the

railroads were being constructed they were very popular. They opened up the country. Then conflict began, resulting in state and federal regulation. That conflict will continue because it is due to diversity of interests. There will be no peace until the public fully controls the railroads. At present little inside oligarchies of railroad men control them. The stockholders have no control. This cannot continue. Government ownership would put an end to this conflict between the railroads and the public.

The above six elements of the railroad problem favor government ownership as a solution.

New York, May 1.

CIVITAS.

TO THE EDITOR OF THE SUN: The Railroad Business Association is a New York organization. Some 286 great manufacturing and contracting corporations scattered throughout the Union make up its membership. They are producers of steel and iron and coal, of locomotives, cars and railway supplies. Railroads and railroad men are not admitted, but they are customers of the members and hence there is naturally a strong railroad bias. That association was formed several years ago to deal with the railroad problem. It proposes no remedies, but points out the troubles. It issues "bulletins" from time to time. The latest one summarizes railroad grievances as follows: The injury to one state by exactions from railroads in other states; duplication of cost by different states having different regulations; deliberate attacks by one state on the commerce of another state; ruin of railroad resources by state actions; limited tracks and terminals due to the same cause; conflicting and overlapping jurisdictions over railroads; regulation by railroad zones; which are artificial; Interstate Commerce Commission acting as advocate, prosecutor, jury, judge and expert; subordinate officials making decisions; lack of power of the commission to order higher rates; protection of the shipper without protection of the railroad; failure to give such rates as will enable the railroads to obtain fresh money to keep up with the growth of the country.

This certainly is a formidable indictment. And it is true, every word of it. "Guilty!"

But how about that other indictment? I refer to the indictment which is now being tried out before the bar of public opinion—the indictment of past and present railroad directorates. The indictment charges that they are there because they happen to be there, or because they have broken in, or because they

inherited their position, or because they took it by default, the old directors having scuttled away like rats. The indictment further charges that those directors are the cause of our troubles and that it is time for them to go. They have caused the stockholders to lose hundreds of millions of dollars. They have aroused the hostility of the public. They have driven away the investor. They have been incompetent and at times crooked. They have run the railroads as though they owned them. They still pine for the fine and free old days when "all sorts of rates could be had and all sorts of tariffs could be found." They have been in power for forty years. They are a fizzle and a failure. They are utterly discredited. "Mene, mene, tekell up-harsin." So runs the indictment. And it is a true bill. "Guilty" is again the verdict.

But what are we going to do about it? Federal incorporation alone will not insure proper railroad directors. It would merely continue present ones. Railroad men and bankers want federal incorporation merely to escape state persecution. They have no idea of giving up their power. Not at all. They don't propose to give up anything. It is useless to argue with them that a federal railroad board would name better directors; better for the stockholders, the bondholders, the public, better for the railroads themselves. The present railroad directors believe that the railroads couldn't go on without them. The national banks had the same idea about banking until the Federal Reserve Board taught them better.

The public has no grievance against the railroads themselves; those massive locomotives, those beautiful coaches, those humble lumbering freight cars, those towering bridges, those solid embankments, those heavy rails, true as steel—all patiently waiting to do the will of man. Neither has the public any grievance against those faithful and efficient engineers, firemen, conductors, brakemen, station agents and yardmen. In other words, the public grievance is not against the railroads and their operatives, but is against the small coteries of men who dominate them—dominate, not for the public good, but for their own ends.

Fifty years ago the New England railroads gave free rides to their stockholders to attend annual meetings to elect directors. Men and women, farmers, tradesmen and small manufacturers all held a few shares and attended, as they attended the old New England town meeting, to elect the best men, the wisest heads.

Now, however, gigantic corporations with hundreds of millions of capitalization and tens of thousands of stockholders, scattered far and wide, hold their annual elections hundreds of miles away from the stockholders. Personal attendance is impossible and so the proxy system has grown up. The Union Pacific holds its annual meeting in Utah; the Southern Pacific in Kentucky. Single stockholders no longer count, and the owner of even a million dollars of stock has no more influence than a feather in a gale of wind. That mode of electing directors is a farce. The old rotten boroughs of England are again in evidence in these annual railroad meetings. The result is New Haven, Frisco and Rock Island. Such episodes will keep on occurring so long as this system continues.

New York, May. 8.

CIVITAS.

TO THE EDITOR OF THE SUN: One of the irrepressible controversies in this country is the intermountain rate question. More than twenty-five years ago the Rocky Mountain country complained to the Interstate Commerce Commission that the railroad rates from the east to the Rocky Mountain country were greater than from the east to the Pacific Coast. The commission in its decision (21 I. C. C. 342) said:

The intermountain country, in which Reno is a typical point, has led in this agitation. A shipper finds it difficult to reconcile himself to paying \$500 a car for the transportation of a car load of merchandise to his own city when that same carload will be carried from the same point of origin through his city to a point 500 miles beyond for \$300. Such a condition appeals to all as *prima facie* unjust.

The excuse given by the railroads was that the rate from New York to San Francisco competed with the water rate around Cape Horn and across Panama, and had to be a low rate or else all the traffic would go by water. As to this, however, the commission said (p. 346):

At that time the railroad interests evidently determined upon driving the ships from the sea, and they very proudly admit that they succeeded in this effort at least to the extent of nullifying or controlling the water competition.

The monopoly felt insecure, however, because, as the commission said:

Without a ship upon it, the ocean has the power to restrain, in some degree, the upward tendency of rail rates. A railroad may not safely

indulge its desire to impose all the traffic will bear between two ocean ports, and it may truly be said that the least poetical of railroad traffic managers never looks upon the ocean without a sense of awe. (Page 352.)

In that decision in 1911 the commission cut the inter-mountain rates heavily, but allowed the rate from New York to San Francisco to be 25 points less than from New York to Reno. An appeal was taken to the "Commerce Court" (a court abolished soon after being born) and that court declared that the commission was wrong (191 Fed. Rep. 856). Then an appeal was taken to the Supreme Court of the United States and that court declared that the commission was right (234 U. S. 476). That was in June, 1914, and thirty days later the matter again went before the commission, and this time the Panama Canal had a bearing. The commission decided January 29, 1915, that the discrimination might be continued (32 I. C. C. 611). Three months later the commission rendered another decision relative to rates to interior California cities, such as Sacramento and Stockton. The commission allowed the railroad to make higher charges to these interior California cities than to California cities on the coast (34 I. C. C. 13). Then the matter was taken up by those cities into the United States Court in California, and in December, 1915, two out of three judges enjoined the railroads from making higher charges to these interior California cities. A rehearing has now been granted. Meantime the Interstate Commerce Commission has taken the matter up again and hearings are going on.

The Rocky Mountain states still have a grievance. At the present time the railroad rates are as follows on a carload of wire.

New York to San Francisco	\$225
New York to Sacramento	261
New York to Reno	330

I have before me a letter from an ex-Congressman of one of those states in which he says:

I predict that the transportation question, west of the Mississippi, is one which will have to be adjusted on an equitable basis or there will have to be a revolution.

This is strong language, but shows the intensity of the feeling. The commission itself in its decision said:

How have the carriers justified this blanket to the coast but not to intermediate points. Long before the blanket had been stretched to its present western extent the community intermediate between its eastern border and the Pacific made a protest against the injustice that was being

done. For nearly a quarter of a century this complaint has been heard and has ceased at times only to be revived with greater earnestness. A line of railroad policy which leads to such result may be presumed to have in it something artificial and unnatural. That which appeals to us as unnatural in this situation is that rates which are said to be less than reasonable because compelled by ocean competition are made from points where we can find no such competition. (Page 354.)

Surely a railroad policy adapted to the conditions of one day may probably change with the conditions of another, and in the very nature of things it must be apparent that the transcontinental carriers cannot continue forever charging higher rates to the intermountain country than to the coast from the Middle West. (Page 365.)

A thousand years ago the robber barons of the feudal system swooped down from their castles on the hills and levied tribute on the passing caravans. Today the railroad barons carve up the railroad world and levy tribute on the commerce of the country. The above shows the result; the mountain states with a deep seated grievance of thirty years' standing; Sacramento, Stockton and other interior California cities with another grievance; transcontinental railroads cutting rates to run out steamship competition; high railroad dividends with high rates on interior traffic. No wonder there is wild talk about revolution. Many years ago the transcontinental railroads delegated to Huntington the fell work of eliminating steamship competition around the Horn and across Panama. The Interstate Commerce Commission in its decision tells how Huntington, well qualified, effectively did the work. And all over the country there are similar episodes of less magnitude; discriminations between communities and cities and towns; discriminations between shippers; discrimination in violation of the criminal law. Every few days some corporation or individual is prosecuted and fined for such discriminations, and for every conviction there probably are fifty discriminations not detected or proved. Does anyone imagine that this can continue? And yet will it ever cease under the present system of control? Those questions answer themselves. It is as plain as day that some new system of control is necessary, and it must be some form of public control.

New York, May 23, 1916.

CIVITAS.

THE RAILWAYS AND THE PEOPLE¹

Railway property being the most easily socialized body of wealth, and one of the largest as well, if the twenty billion dollars of railway property were taken away from private control, your enormous and distressing inequalities of wealth would no doubt be largely limited. This is the first advantage, and it is considerable. Second, railway investment, which employs so much of your capital, would lose its speculative character by the substitution of bonds bottomed on the government's credit for bonds bottomed on the credit of a private company. This would remove one of the chief grounds you have for complaint against your railways as hitherto managed.

Unfair discrimination, in the next place—another just ground of complaint—would also disappear under government ownership. It is hard to conceive of a government in your country that would not administer its railways impartially. The impersonal and general nature of government, which in other respects is rather against its efficiency in railway operation, is in favor of it at this one point. A government is raised above the temptations to favoritism which have beset private companies in the throes of competition, and also above the temptation to narrow and local views of industrial and commercial development. Therefore, too—this is the fourth advantage, and very important—under government ownership rates can be adjusted with reference to a maximum development of the country *as a whole*. Germany gives an excellent example of what can be accomplished in this way. The privately owned railway is bound to be most of all interested in the development of the section that it serves; but if the government took its railway work seriously and intelligently, no section would thrive at another's expense through conflict of transportation interests. There would be a harmonious and balanced development of all sections, because the government is able to view the country as a whole, and is indifferent to a forced or unrelated development in any part.

There are one or two minor points besides, possibly, that might be mentioned, such as the advantages of government-owned roads for military purposes; but to a non-military coun-

¹ An interview with Sir Thomas Shaughnessy, K.C.V.O., President of the Canadian Pacific Railway, by Albert J. Nock. Outlook. 107: 33-7 May 2, 1914.

try like yours this scarcely counts. Or, in the event of any great general labor trouble, it is an advantage for the government to own the railways, so that transportation cannot be cut off. But there is no necessity for any such labor war in a civilization like yours, and, if you deliberately invite it, one is tempted to say you deserve no more than the fortunes of war. The best antidote for Larkinism—or, as you would call it, Haywoodism—will be found in meeting organized labor with the direct, cordial, and honest interest that human beings ought to feel in one another's welfare. By habitually getting over into each other's point of view, without arrogance or suspicion, with no ulterior motive beyond being human and helpful, both sides to any labor controversy will forthwith find the way to peace, to mutual esteem, and to a sense of common interest.

The same holds true in the present controversy between your railways and your public. There should be extreme tolerance and a sustained effort after mutual understanding. It must be remembered that you and your railways have both been proceeding upon a very different theory of railway property from that which you have recently adopted. You have all been going on the idea that a railway is private property, owned by its shareholders in the same absolute sense in which they might be said to own their overcoats and hats. The public is as much responsible as the railways for whatever abuses have grown out of this idea; for you all had it. And now, in the quick transition to a new and truer theory, there cannot help but be some friction and misunderstanding which patience, fairness, and co-operation will quickly minimize.

COMMON SENSE OF THE RAILROAD QUESTION¹

Unless the railroad system is unified and simplified, the complexity of the situation will drive the country to government ownership as a solution of the difficulty. The argument in favor of it is simple. It is urged that the Post-office Department is already engaged in transportation which is conducted to the entire satisfaction of the people; that its work now involves expendi-

¹ By Francis G. Newlands, Chairman, Newlands Investigating Committee. *North American Review*. 180: 576-85. April, 1905.

tures equal to about one-seventh of the operating expenses of all the railroads; that an enlargement of its operations could be secured by organizing a Division of Transportation in this department; putting at its head a capable man, trained and experienced in railroading; authorizing suit for condemnation against all railroads, the government entering into immediate possession and retaining the present force of employees and officials, eliminating such of the latter as may be unnecessary under unified conditions; the condemnation to cover simply the interest of the stockholders, the market value of which is now about \$4,000,000,000 leaving existing bonds aggregating about \$6,000,000,000 as a lien upon the property, to be retired as they mature with government bonds at $2\frac{1}{2}$ per cent, the stock to be paid for by a present issue of government bonds at the same rate.

The railroads are now capitalized at about \$12,000,000,000, one-half in bonds and one-half in stocks. The market value of the total issue is now about \$10,000,000,000. The gross revenue of all the railroads for the last year was about \$1,950,000,000, an increase over the preceding year of about \$175,000,000. The operating expenses now aggregate about \$1,260,000,000, leaving about \$690,000,000 as the net income. It is urged that, under government ownership, the government would have to pay out of this net income the present interest on existing bonds, amounting to about \$270,000,000, and $2\frac{1}{2}$ per cent on the \$4,000,000,000 of the government bonds, issued in lieu of existing stock, about \$100,000,000, or \$370,000,000, in all, leaving \$320,000,000 for betterments, extensions and a sinking-fund for the redemption of the bonds. This latter sum can be increased by the gradual reduction of the interest on the railroad bonds from an average of $4\frac{1}{2}$ per cent to $2\frac{1}{2}$ per cent, a saving of \$120,000,000 annually. It is contended that a sinking-fund could thus be provided which would extinguish the entire debt in less than fifty years, and leave the operating expense alone as a charge upon the commerce of the country.

METHODS OF NATIONALIZATION¹

As to the method of procedure for the nationalization of railroads, a whole volume should be written. And it should involve a careful study of the various methods that have been pursued by the different countries that have established public ownership. The methods are different in the different countries, and there is no doubt that many different devices may be resorted to as a means for accomplishing the desired end.

1. *Purchase of Stock.*—In Germany, we are told by Mr. Russell in his "Uprising of the Many" the German government began by buying stock first in one and then another of the various railway systems, and thus gradually established the government ownership of about seven-eighths of the total mileage there. However, the foreign nations have been much more careful in safeguarding their interests in the matter of railways than have our people in America. This makes the provision for public ownership easier. The Prussian law of 1838 established a system of progressive taxation on the net earnings of the railroad companies. All moneys realized from these taxes were to be used by the state in purchasing railway shares. And then all income on such stock must be used for the same purpose and no stock so purchased can again be put on the market. In this way the railroads are made to provide beforehand the money with which to purchase them. The railroads buy themselves out. In this way the transition of public ownership works itself out automatically. In addition to this the government also built and extended railroads.

The transition was gradual. For thirty years private and public roads were operated side by side in competition. And as a result of this experience the government more and more determined that public ownership was the correct policy.

2. *Outright Purchase.*—In Switzerland the method was somewhat different. Anticipating the possibility of national purchase, the government had passed, in 1883 and 1895, a law subjecting the railway companies' accounts to rigid regulation and inspection. This became the basis for the purchase later on. The question of the purchase of the railroads was submitted to a general referen-

¹ From "Public ownership of railways" by Carl D. Thompson. p. 53-6. Published by the Socialist Party of the United States.

dum in 1898, and was carried by an overwhelming majority. The details of the method of purchase were provided for carefully and the government appropriated \$200,000,000 in 1899 for the purchasing of the roads. In accord with the laws previously passed, the government was allowed to take possession of the roads on giving three years' notice and paying 25 times the average net profits for the ten years preceding the announcement of purchase. Or the government could pay the construction value—whichever method of computation produced the larger sum, deduction being made for any sum necessary to bring the road up to a standard condition. The final sum actually paid for the four railroads now in the government possession was \$186,078,000. ("R'ys, T. & P.," p. 362.)

The details for the purchase of the Swiss railroads as well as the whole plan for the administration of the roads were worked out by the Swiss Federal Assembly with the usual thoroughness and exactness that characterizes the administration of the Swiss republic. The text of the law which was passed Oct. 15, 1897 may be found in Vrooman's "American Railway Problems," in the Appendix IV.

In general the methods of securing government ownership have been a gradual purchase of one after another of the systems. In some cases, however, as in Switzerland and Italy, the whole system has been taken over practically at once, and the money appropriated out of the general government funds for this purpose.

3. *Eminent Domain*.—And if the railroads should refuse to sell, the government always has at hand the right to eminent domain—a perfectly legal and constitutional method of forcing sale and one with which the railroads and the public are perfectly familiar.

4. *Building Roads*.—Or again the government may build roads of its own. In some cases this would be natural and advantageous no doubt. The government has built and operated railroads in Panama—why not in the United States? Even the single city of Cincinnati, Ohio, has built and successfully financed a railroad 336 miles long crossing two states outside of Ohio. Surely if Cincinnati, New Zealand and Siam can build railroads the United States of America can.

The experience of Cincinnati is interesting and illuminating. It is the only city in the world that owns a railroad. It was

built by the city 1869-1879. The city issued bonds and built the road and leases it to a private company. This company pays such a rental that it covers all the cost of the bonds interest and all. Under the terms of the lease the company has recently built some \$3,000,000 terminal facilities and a \$750,000 bridge in the city and it turns over a clear profit of \$450,000 to the city annually. In other words by building and owning this railroad the city of Cincinnati has acquired a property now valued at \$40,000,000 is paying for it out of the proceeds it makes and laying aside for the city funds nearly half a million every year in clear profits over and above all expenditures for interest on bonds, sinking funds and all. (Pamphlet published by the Board of Trustees of the Cincinnati and Southern Railway, Cincinnati, Ohio; also bulletin of the Johns Hopkins University for Jan.-Feb. 1894 on "The Cincinnati Railway.")

In some cases the establishment of government ownership is effected by the government foreclosing on mortgages which it holds upon the railway systems. The Social Democrats in the state legislature of Wisconsin have repeatedly urged this as a possible method for the United States. Between 1876 and 1912, 739 different railway companies in the United States have been in the hands of receivers, that is, practically owned by the government. In addition to this 988 other roads have been sold under foreclosure during the last 37 years. (Statistical Abstract of the United States, 1912 p. 327.) Such situations would afford splendid opportunities for an alert government bent on public ownership to get possession of railroads. The socialists suggest that whenever this occurs and a road is taken over by the government, re-organized and put upon a paying basis, that instead of handing it back to private enterprise, it shall be kept. Had this policy been pursued up to the present time, a very large proportion of the total railway mileage of the country would already belong to the government.

It will be seen, therefore, that any of a number of different methods may be used for the establishing of government ownership. A system may be bought outright as proposed by Senator Pettigrew and explained in his argument on the bill before congress ("Railway Nationalization."). Or the government may follow the method explained by Emil Vandervelde, the scholarly leader of the Social-Democrats in Belgium, which he calls "Interpenetration," that is, the gradual purchase of stock as was done

by the German government. Or it may hold those which fall into the hands of the government through the failure of private financiering and bankruptcy, or it may foreclose its mortgages upon such roads as are unable to pay. At all events, it is quite practical to provide for the nationalization of railroads by means which will not require a single cent of additional burden upon the people.

Some object to public ownership because they think that the government would have to contract an enormous debt in order to acquire the roads. On the contrary, however, as we have shown, it is possible for the railroads to be nationalized without the increase of taxation, or any additional burdening of the people.

They can be made to pay for themselves.

According to the Interstate Commerce Commission, the actual value of the railroads of the country was less than \$9,000,000,000 in 1900. The value now could not exceed \$11,000,000,000 or \$12,000,000,000. Let us take the latter figure as a basis. The government could borrow money on bonds at probably two per cent; certainly not more than three per cent. We will take the latter. The interest charge then on the debt created, if we paid the \$12,000,000,000 for the railroads and borrowed the money at three per cent would be \$360,000,000 per year.

But the present net income of the railroads is \$833,000,000. (See Van Wagenen's "Government Ownership of Railways," G. P. Putnam's Sons, New York, 1910. p. 46-7.) On that basis the people of the United States by purchasing the railways would be \$437,000,000 to the good per year from the very outset.

However, even if it should be necessary in order to facilitate the matter, for the government to assume a debt of a few million dollars, it would be infinitely wiser to do so than to allow the present condition to continue. The railroads are capitalized at over nineteen billion dollars (\$19,208,935,081 in 1911), of which certainly more than one-half and in many cases as high as two-thirds represents no investment whatever. And yet the railroads are managed, rates are fixed, expenses of operation manipulated in such a way as to compel the people of the United States to pay over to them enough tribute to give them a high rate of interest on the total capitalization. Furthermore, the capitalization of the railroads is increasing every year. It increases at the rate of about \$650,000,000 per year. And this increasing capitalization

means simply that the private ownership of railroads is the means by which the capitalistic classes are increasing their rates of plunder year after year indefinitely. If that rate keeps up for 10 years the results would be appalling. It would mean that by that time the people of the United States would be compelled to pay, through transportation charges, interest upon a vast sum of money amounting to 25 billions of dollars. By the side of such a calamity, the public debt of a few millions that would be necessary to buy the roads would be only a drop in the bucket.

Is there any other way of escape from this terrible threat of increasing capitalization than through public ownership by whatever means may be reasonably safe and just?

UNCLE SAM AS A RAILROAD MAGNATE¹

The average American thinks little of Uncle Sam as a business man. We prefer as a rule to believe in the efficiency of private enterprise; yet down in Panama Uncle Sam has shown remarkable ability as a railroad magnate. The United States, in building the Panama Canal, is not only operating two railroads, but is running in connection with these a steamship line, two hotels, a department store and a food supply business. This first large test of direct government activity in industry and commerce seems particularly timely in view of the suggestions that the government solve the Alaskan tangle by building and operating a railroad of its own. Our experiences in Panama, remarks Mr. Albert Edwards in *Success* are demonstrating that the spirit of American enterprise is bigger than "individual initiative"—that epoch-making things can be accomplished, even when individual activity fails. "The facts of the case force us to revise our old judgment. Collective activity—this new force which we are developing with such amazing success in the tropics, which we Americans have carried further than any other nation—is worth considering as the means of solving our problems at home."

The Panama Canal is a government job. It is dug by government employees, bossed by government engineers. Not one employee, from Colonel Goethals down to the Barbadian negro boys who carry water, hopes for private profit in this—the most colossal enterprise of the twentieth century. The first heterodox

¹ *Current Literature*. 51: 512-15. November, 1911.

fact which impresses itself upon the visitor from home, remarks Mr. Edwards, is the sight of the high power locomotive with "U. S." stencilled on the cab.

There are two railroads in the Canal Zone owned and operated by the government: the Isthmian Canal Commission system, used exclusively for construction purposes, and the Panama Railroad, which, beside helping in the canal work, does a large and profitable commercial business. Compared with other tropical railroads the P. R. R. is a model of efficiency and economy in every department. There is no system at home so thoroughly equipped with safety appliances. The accident rate both for employees and passengers sets a standard which none of our privately owned roads have ever approached. The two systems together operate about 3,000 miles of track in the zone, and carry more traffic per mile than any railroad in the states except a few terminal systems like that of the Chicago stock-yards.

The annual report to the stockholders of the Panama Railroad Co.—it is technically a private corporation so that it can conduct a commercial business—for the year ending June 30, 1910, shows a gross earning of \$6,100,788.83. Extensive relocation work is in progress, but the operating expenses were only \$4,358,426.92. The company also operates a direct line of steamers between Colon and New York. They make the run between these ports in a day less than the competing lines and in the year ending June 30, 1910, they earned over \$150,000 net.

The people in authority, Mr. Edwards goes on to say, have told us that a public-owned railroad would surely fail; it would be eaten up by corruption administered on the "spoils system," and become the headquarters for general inefficiency. Our experiment in Panama seems to prove the fallacy of this argument.

SHOULD THE NATION OWN THE RAILWAYS?

With the government operating the railways there would be a great reduction in the number of men employed in towns entered by more than one line. For instance, take a town where there are three or more railways, and we find three (or more) full-fledged staffs, three (or more) expensive up-town freight and ticket offices, three (or more) separate sets of all kinds of officials and employees, and three (or more) separate depots and yards to be maintained. Under government control these staffs—except in very large cities—would be reduced to one, and all trains would run into one centrally located depot; freight and passengers be transferred without present cost, annoyance, and

¹ By C. Wood Davis. Published in *The Arena*. 4: 273-92. August, 1891.

friction, and public convenience and comfort subserved, and added to in manner and degree almost inconceivable.

Economies which would be affected by such staff reductions would more than offset any addition to the force likely to be made at the instance of politicians, thus eliminating that objection; such saving may be estimated at \$20,000,000 per annum.

With the nation owning the railways the great number of expensive attorneys now employed, with all the attendant corruption of the fountains of justice, could be dispensed with; and there would be no corporations to take from the bench the best legal minds, by offering three or four times the federal salary; nor would there be occasion for a justice of the Supreme Court of Kansas to render a decision that a corporation chartered by Kansas for the sole purpose of building a railway in that state has the right and power under such charter to guarantee the bonds of corporations building railways in Old or New Mexico, and shortly after writing such decision be carted all over the seaboard states in one of the luxurious private cars of such corporation. Under national ownership such judges would pay their travelling expenses in some other way, and be transported in the ordinary manner, and not half as many judges would travel on passes. There are many judges whose decisions any number of passes would not affect; but if passes are not to have any effect upon legislation and litigation, why are congressmen, legislators, judges, and other court officials singled out for this kind of martyrdom? If the men who attain these positions remained private citizens, would passes be thrust upon them?

Although the reports of the Victorian Commissioners show, in detail, all the expenditures of railway administration, yet not one dollar is set down for attorneys' salaries or for legal expenses, and it is presumed that the ordinary law officers of the government attend to the little legal business arising, and yet judging from reports made by Kansas roads, the expenditures of the corporate owned railways of the United States for attorneys' salaries and other legal expenses, are at least two per cent of the entire cost of operating the roads, and yearly aggregate some \$14,000,000, all of which is taken directly from railway users, and is a tax which would be saved under national ownership, as United States district attorneys could attend to such legal business as might arise. This expenditure is incurred in endless

controversies between the corporations, in wrecking railways, in plundering the shareholders, in contending against state and federal regulation, in manipulating elections and legislations, and in wearing out such citizens as seek legal redress for some of the many outrageous acts of oppression practiced by the corporations. Once the government was in control, these lawyers would be relegated to some employment where they would do less harm, even if not engaged in a more honorable vocation than that of trying to defeat justice by the use of such questionable means as the control of the vast revenues of the corporations placed in their hands.

Is it possible that the railway companies can legitimately use anything like \$14,000,000 yearly in protecting their rights in the courts?

With national ownership the expenditures involved in the maintenance of traffic associations would be saved, and railway users relieved of a tax that, judging from the reports of a limited number of corporations of their contributions towards the support of such organizations, must annually amount to between four and five million dollars.

Of the six hundred corporations operating railways, probably five hundred maintain costly general offices, where president, treasurer, and secretary pass the time surrounded by an expensive staff. The majority of such offices are off the lines of the respective corporations, in the larger cities, where high rents are paid, and great expense entailed, that proper attention may be given to the bolstering or depressing the price of the corporation's shares, as the management may be long or short of the market. So far as the utility of the railways is concerned as instruments of anything but speculation, such offices and officers might as well be located in the moon, and their cost saved to the public. The average yearly cost of such offices (and officers) is more than \$50,000, and the transfer of the railways to the nation would, in this matter alone, effect an annual saving of more than \$25,000,000, as both offices and officials could be dispensed with, and the service be no less efficient.

Moreover, with the nation owning the railways, the indirect but no less onerous tax levied upon the industries of the country, by the thousands of speculators who make day hideous on the stock exchanges, would be abrogated, as then there would be neither railway share nor bond for these harpies to make shuttle-

cocks of, and this would be another economy due to such ownership.

Railways spend enormous sums in advertising, the most of which national ownership would save, as it would be no more necessary to advertise the advantages of any particular line than it is to advertise the advantages of any given mail route. From reports made by railway corporations to some of the western states, it appears that something over one per cent of operating expenses are absorbed in advertising, aggregating something like \$7,000,000 per year, of which we may assume that but \$5,000,000 would be saved, as it would still be desirable to advertise train departures and arrivals.

A still greater expense is involved in the maintenance of freight and passenger offices off the respective lines, for the purpose of securing a portion of the competitive traffic. In this way vast sums are expended in the payment of rents, and the salaries of hordes of agents, solicitors, clerks, etc., etc. Taking the known expenditures, for this purpose, of a given mileage, it is estimated that the aggregate is not less than \$15,000,000 yearly, all of which is a tax upon the public, that would be saved did the government operate the railways.

Under government control, discriminations against localities would cease, whereas now localities are discriminated against because managers are interested in real estate elsewhere, or are interested in diverting traffic in certain directions; again, under corporate management, it is for the interest of the company to haul a commodity as far as possible over its own lines (with the government owning all the lines this motive will lose its force), and thus traffic is forced into unnatural channels. For instance: much of the grain from Kansas should find its way to foreign markets via the short route to the Gulf, the distance to tide water by this route being less than half what it is to the Atlantic, yet so opposed to this natural route are the interests of the majority of the corporations controlling the traffic associations, which now dictate to the people what routes their traffic shall take, that the rates to the Gulf are kept so high as to force the traffic to the Lakes and to the Atlantic; and as all the railways leading to the Gulf have lines running eastward, the much lauded corporate competition fails to help out the citizens of Kansas, who are subjected to the domination of the new tyrant denominated a "traffic association." With the nation operating the

railways, all this would be changed, and localities favorably located would be able to reap the benefits which such location should give and should such a condition ever obtain, the farmers of western Iowa will not then ship corn to the drouth-stricken portion of Kansas for fifteen cents per one hundred pounds, while the Kansas corn grower, living within seventy-five miles of the same market, is charged ten cents per one hundred pounds for a haul one eighth as long. By such rates the railways force the hauling of corn from Iowa to western Kansas, and then force the corn grower of central Kansas to send his corn eastward, the result being two long hauls, where one short one would suffice; but then the corporations would have absorbed less of the substance of the people.

Another, and an incalculable benefit, which would result from national ownership, would be the relief of state and national legislation from the pressure and corrupting practices of railway corporations which constitute one of the greatest dangers to which republican institutions can be subjected. This alone renders the nationalization of the railways most desirable, and at the same time such nationalization would have the effect of emancipating a large part of the press from a galling thralldom to the corporations.

In Victoria, the parcel or express business is done by the government railways, and the rates are not one half what they are with us when farmed out to a second lot of corporations. Space does not permit the discussion or even the statement of the many salutary phases of government control, as developed in the various countries of Europe, and it is not necessary, as there are abundant reasons to be found in conditions existing at home, for making the proposed change. By far the most menacing feature of continued corporate ownership is the power over the money markets which it places in the hands of unscrupulous men, any half dozen of whom can, at such a time as that following the failure of the Barings, destroy the welfare of millions, and plunge the country into all the horrors of a money panic. Whether it be true or not, there are many who believe that a small coterie, who had information before the public of that condition of Baring Brothers and that a block of many millions of American railway securities held by that house were being (or soon would be) pressed upon the market, entered into a conspiracy for the purpose of locking up money and thereby depressing prices in

order to secure, at low cost, the control of certain coveted railways. The railways were secured, and there is not much doubt that they had been lying in wait for such a critical condition of the money markets to accomplish this purpose, which still further enhances their power for evil. With the railways nationalized, not only would there be no temptation for such nefarious operations, but the power of such men over value would be greatly lessened, if not wholly destroyed, as there would be no railway shares for them to play fast and loose with, and as money, instead of being tied up in loans on chromos representing little but water, would seek investment in bona fide enterprises, their operations would have little influence, and would certainly have no such baleful power over the industries of the country, as their ability to affect the value of railway shares—on which such immense sums are now loaned on call—gives them, they being able by locking up a few millions when the money market is in the condition, which obtained at the time of the Baring collapse, to force the calling of loans and the slaughtering of vast numbers of the shares, carrying the control of the railways they covet. If only for the purpose of divesting "the dangerous wealthy classes," of this frightful power, national ownership would be worth many times its cost, and without such ownership a score of manipulators are soon likely to be complete masters of the republic and all its industrial interests; hence, the question reverts to the form stated in the opening of this paper: Shall the nation accept as a master a political party that may be dislodged by the use of the ballot, or shall the republic be dominated by a master in the form of a score of unscrupulous Goulds, Vanderbilts, and Huntingtons, who cannot be dislodged, and who never die?

NATURAL MONOPOLIES AND THE WORKINGMAN¹

There are various undertakings which are monopolies by virtue of their own inherent properties. Recent discussions have made these businesses well known. They are railways, telegraphs, telephones, canals, irrigation works, harbors, gasworks, street-car lines, and the like. Experience and deductive argument alike

¹ By Richard T. Ely, Professor of Political Economy, University of Wisconsin. *North American Review*. 158: 294-303. March, 1894.

show that in businesses of this kind there can be no competition, and that all appearances which resemble competition are simply temporary and illusory.

The policy which in the United States has heretofore been pursued with respect to these businesses has been to turn them over to private corporations and to encourage attempts at competition. There are exceptions which prove the rule. The post-office has from the start been a government undertaking, and, in the East, water-works have generally belonged to cities. A few cities have owned gasworks, and there may be some two hundred cities in the United States owning electric-lighting plants.

The results of the policy are now clearly manifest. First, we observe vast waste. As these businesses are non-competitive, every attempt to force competition upon them means a waste of a great amount of labor and capital. One railway manager claims that if the railways of the country were operated as a unit, the saving would be \$200,000,000 per annum. This may be an exaggerated estimate, but the waste is enormous; and when we begin to estimate what it has been in the past in railways alone in the United States, we at once run up into the hundreds of millions.

A second result of the policy advocated, which now appears plainly, is the enormous and unprecedented inequality in fortunes in the United States. A large proportion of our mammoth fortunes can be traced to this false policy. Had the post-office been private property, we would have had a still larger number of multi-millionaires who would have absorbed a large proportion of the benefits of improvement in that business, the advantages of which have, through public management, accrued to the people at large. Wherever railways have been from the beginning public property, we notice the absence of the so-called "railway magnate." Political sages, like Aristotle, have in all ages told us that excessive inequality of fortune is a social danger, and especially so in a republic.

A further aim which, it is claimed, the reform advocated would promote is the elevation and purification of public life. The greater proportion of corruption in public life is connected directly or indirectly with natural monopolies. It is absolutely necessary that some control should be exercised over these, but those in charge of these monopolies attempt to escape this control. Sometimes they are unjustly attacked by legislatures, and they use bribery and corruption to defend themselves against injustice; and sometimes they use bribery and corruption to

ward off legitimate regulation. Aggression sometimes proceeds from the one source, and sometimes proceeds from the other, but the result is that we have become involved in a vicious circle of corruption proceeding from monopolistic undertakings.

Government ownership and administration of these businesses would tend to the simplification, and therefore to the improvement of government. Private ownership necessitates endless legislation; and if all laws on our statute-books which have been placed there by such ownership should be removed, the lawbooks of the country would begin to look comparatively lean. How brief and simple is the legislation concerned with our post-office compared with that which deals with railways, for example! Then how largely is litigation connected with private ownership! Remove all litigation peculiar to private ownership and management of monopolies, and the courts would not be so far behind in their cases. Another misfortune is that so large a proportion of the talent of the country is absorbed by private enterprises. Public life does not offer corresponding inducements to capacity.

These are general grounds for the change from private to public ownership, and the workingman is affected, inasmuch as he belongs to the social body. But we must consider the subject in its more immediate relations to the workingman. It is important to show that this is a reform to which he should direct his attention, rather than to many others which now absorb an undue proportion of his energies.

We are speaking of the wage-earner—the receiver of wages. The monopolist is not likely to be a good employer of labor. His power is so great, and that of a single wage-earner so small in comparison, that the former is exposed to the danger of becoming an arbitrary and arrogant employer. Even when the employees of monopolists unite in labor organizations, their power is not great enough so that they can enter upon labor contracts upon an equal footing with their employers. The outcome of recent railway strikes in the United States demonstrates this sufficiently.

It has been held by some that it should be made a penal offense for those who are employed by railway corporations and other corporations of the kind with which we are dealing, to strike, because the interests of the general public are involved. There can be no question that the general public is concerned, for the services rendered by undertakings of the class called "natural monopolies" are necessities in the modern business world.

But, if these wage-earners—the most important and numerous group of wage-earners in the country—cannot resist oppression and injustice in the only way in which resistance is effective, namely, by strong combination and united action, then they are virtually reduced to slavery. The only way out of the dilemma is government ownership. If government is the employer, then the employed have representation in the controlling body ample to protect their interests. It is perfectly legitimate for the people to say: "As we guarantee to you equitable treatment and fair wages, we insist that you shall serve the public faithfully like soldiers. This is only a just return for what you receive."

It is claimed that the policy advocated would tend to steadiness of industrial development. At present, times of great prosperity are followed by times of stagnation, and during the latter hundreds of thousands and even millions seek labor in vain. Government could make far-reaching plans for the development of those industries which we call natural monopolies, and execute them regularly. A large industrial field for government as well as for private enterprise gives a certain balance to the whole industrial life which must otherwise be wanting. It is to be noticed, also, that a time which is unfavorable for private industry is often a time most favorable for the public undertakings, because labor is cheap and capital also, as a rule. Moreover, government credit does not break down as does that of the vast private corporations with which we are dealing. Reflect upon the great railway corporations which have recently gone into the hands of receivers in the United States! It is unquestionable that enterprises of the sort which we have been considering have, in their failure, had not a little to do with the present crisis.

We may look at crises and consequent industrial depressions from a different point of view. What does stagnation in business mean but absence of exchange? The wheat-grower in Iowa wants shoes, and the shoemaker in Massachusetts wants wheat, but they are not able to supply each other's demands, and both suffer. Now, cheaper and better transportation would facilitate exchanges and thus tend to promote general and continuous prosperity.

The private monopolist fails conspicuously in protection to life and limb, whereas government in this respect manifests decided superiority. Government is peculiarly sensitive in regard to human life. If a government building collapses and destroys

a number of human lives, we are astonished and indignant, and those in any way responsible for the disaster are placed in a most unfortunate position; but we take it as a matter of course that railways should every day in the year destroy human life needlessly. In proportion to the number travelling, there are thirteen times as many accidents in the United States as in Germany, where government ownership of railway obtains, and six or seven times as many accidents to employees in proportion to the total number. And no wonder! The first thing which attracts attention in Germany is the careful protection to life and limb. Accidents of daily occurrence in Chicago are an impossibility in Berlin, a city of equal size. Contrast the efforts of the United States to save life as seen in our truly admirable life-saving service on our coasts with the conduct of those railway presidents who rush to Washington and to our state capitals to prevent the passage of laws to compel the railways to use well-known and approved safety appliances!

It is claimed that there is greater freedom in the service of government than in the service of the vast corporations which manage natural monopolies. And the freedom of the employed may be still further increased by better civil-service regulations. The nobility of public service is of importance to the wage-earner of every grade. The uniform of government is an honor, while the livery of private service is considered a badge of inferiority. It is public service which has developed the great leaders of our civilization. Private service could never give us a Washington or a Lincoln. Government ownership implies the use for general social purposes, and not merely exploitation for dividends.

In determining railway fares under government ownership, the question has to be asked, not merely, What will be the net financial returns? but, What will be the total social effect? Recently, what is called the "zone-system" has been introduced in Berlin and vicinity, to encourage a decentralization of population. Without attempting to describe the zone system, it may be said that it implies a reduction of railway fares. It was not merely to ask whether the reduction in fares would yield large net returns, but whether the result would be beneficial, because the railways were public property. It has been found desirable in some instances even to sacrifice a pecuniary return for social advantage of a different sort, which far more than counterbalances the sacrifice in money.

The purchase of the railways would give the property far greater value than the government bonds issued to pay for them, because the consolidation of the railways would at once increase enormously their value. The increase in value would be equal to the saving capitalized, and if we reduce the estimate of \$200,000,000 per annum by one-half, we will still have a capitalized gain of \$2,500,000,000, even if we capitalize the same at four per cent. We have a further saving which results from the superior credit of government, for this superiority would lead to a vast reduction in interest charges whenever the bonds could be refunded.

TOWARDS GOVERNMENT OWNERSHIP¹

The great railroad strike—that was saved from coming off only by the hurried yielding of Congress and the President—and the renewed conflict on the traction lines of New York City put searching questions to us as a people.

What do we propose to do about it? Can we permit the employers and the workers in the transportation services, local and national, to go on settling their differences by force and arms over our prostrate selves? Since we obviously cannot permit it, what other method of solution of their controversies have we to offer—and to compel them to take?

Strikes, like war, have two fatal disabilities. They cause an intolerable amount of suffering, to the innocent bystanders as well as to the participants; and there is no certainty that the decisions they bring about will be just. It is a tiresome truism that the use of force never determines who is right, but only who is the stronger; but it is one of those truisms, like the multiplication table, that must be reiterated until everybody accepts them without question.

Strikes, like war, must pass. They must pass because men are, at least potentially, reasoning beings, and war, both international and industrial, is unreasonable. But there is much that must be done before their passing will be in any considerable degree accomplished.

Just at the moment we are concerned in this country with a special phase of this problem of industrial conflict. It has to do with disputes between employer and worker in public service

¹Independent. 87: 439-40. September 25, 1916.

enterprises. This is a particularly interesting phase of the industrial problem because in it the elements stand out with peculiar distinctness. We shall some day realize that all industry is a matter of public service, to which the community has a real and vital relation; but in this day of the world the impression still widely persists that there is such a thing as "private business," the human relations within which are matters subject only to personal arrangement unhampered by community action.

But in the public service enterprises it is increasingly clear to any but the feudal-minded that there are three parties at interest—those who provide the capital and manage the business, those who perform the labor, and the community at large. The community has an indisputable part in this trio because the business is founded on a privilege granted by the community thru a franchise; and because the convenience and comfort of the community are affected with the most complete directness by the conditions under which the business is carried on.

In a public service enterprise the third party in interest, the public, has the ultimate authority and the ultimate responsibility. The community must not only see to it that the railroads accord justice to the public; it must not only make certain that the railroads receive justice from the public. It must insist that the railroad managers and the railroad workers maintain the balance of justice between themselves. It is not conducive to the common good that a trolley line should not render efficient service to the people; nor that the people should compel a trolley line to operate under unfair and oppressive conditions; nor that the motormen and conductors on the trolley line should be overworked or underpaid; nor that the managers of the trolley should be bullied by a powerful labor union.

The representatives of the community in New York City during the recent traction strike recognized this responsibility of theirs, and attempted to bring about justice and peace between employers and workers thru the medium of conference and counsel and compromise. The representatives of the nation recognized it in the threatened railroad strike, and, under the influence of the organized power of the workers, compelled by legislation the employers to grant their demands.

No question is settled until it is settled right. The New York traction agreement has already been broken, and each side throws the blame upon the other. The railroads threaten to attack the constitutionality of the railroad eight-hour law in the

courts; and in any case the fact that the law was passed as it was, frankly to avert a cessation of railroad operation through a strike and not because Congress was convinced of the justice of the workers' demands, raises the irritating doubt whether, after all, that question was settled right. At least it was not settled in the right way.

All these considerations point, as we said in a recent editorial, toward another way of resolving and avoiding disputes between employers and workers in public service enterprises. If we were to combine two of the elements in the trio into one we should simplify the problem and accelerate the solution. We can do it by making the community the employer, by establishing government ownership and operation of railroads, traction lines and other public services.

We should then have only two interests at stake—the public interest, as owner of the enterprise and beneficiary of the service, and the interest of the workers. More and more, as humanity becomes more enlightened—and more human—it is coming to be realized that the interest of the workers is not a private interest but an intensely public one. The past generation, and particularly the past decade, has seen this recognition taking shape in legislative, administrative and judicial process. The interest of the workers is the interest of all. So with government ownership of public services we should have the present apparent division into three unrelated interests replaced by amalgamation into one universal interest. The problem before the government representatives of the people would then be to afford public service at the lowest rates compatible with the most enlightened conditions of work and generously just standards of compensation to the workers.

There is one other element that is making for government ownership. If the operations of the railroads are to be regulated by government at both ends of the line, thru the fixing of railroad rates by commission and the decreeing of wages and hours of labor by Congress, it may soon be difficult to induce private capital to invest in railway extensions and improvements.

The natural risk of investments may be too largely increased to make such investments sufficiently attractive. Our railroads must be continually extended and improved. If private capital will not, public capital must.

It is probably true that government operation, under existing

conditions of political development, does not mean the most economically sound operation. Any of our great railroads, for instance, is better organized and managed from the dual point of view of efficiency and economy, than our postal service. To say this is to cast no reflection upon individual postal officials and employees; it is to reflect rather upon Congress and the people back of Congress. But whosoever the fault, the condition flagrantly persists.

Nevertheless, there comes a point where the economic loss through political management may be offset by the social gain. Freedom from interruptions in the service thru labor disputes would be a condition worth a high price. The assurance of the best working conditions and thoroughly adequate pay for all workers would be a social advantage worth making sacrifice for.

This is the theoretical logic of the question. It is rapidly becoming the practical logic of the situation. Government ownership of the public services looms large on the horizon.

RAILWAYS AS A PART OF A SYSTEM OF NATIONAL DEFENSE¹

There is perhaps reason for congratulation that our railroad system as a whole has had its foundations so broadly laid. There is wanting, however, a vast amount of development with a specific purpose in view, before it could begin to fulfill its functions as a part of a system of national defense.

In consideration of some features of the service that would be required of our railways in the event of war with any nation, it will be useful to note some of the demands that are provided for under circumstances in which railways are treated primarily as a part of the military organization. There can be pointed out some of the respects in which our railway system not only falls short of meeting this standard, but is even inadequate to serve the modest military equipment that we have considered sufficient in time of peace.

Germany's Transportation Facilities

Admittedly, Germany has reached the highest point yet attained in military efficiency. It has for years recognized the

¹ By W. L. Park, Vice-President, Illinois Central Railroad.

value of sufficient military facilities. To serve as a part of its military organization has been the prime consideration in the construction, equipment, organization and maintenance of its railways. The Army and Navy Journal, April 10, 1915, quotes from the result of a survey by a Dutch general of the development of the German railway system from a military point of view since the Franco-Prussian war. As early as 1870-1871 there were at the disposal of the German military authorities altogether 7 railroad lines in North Germany and 3 in South Germany. Only one, that from Berlin to Cologne, had double track. Yet with these facilities it was possible to convey 16 army corps, an aggregate of 450,000 men, to the frontier in 11 days. Since then military authorities have never ceased in the development of the railway system on a strategical basis. The results are striking. Germany now has 12 double-track railways lying between Osnabruck on the north and Ulm on the south, 125 miles east of the Rhine. Every army corps normally garrisoned east of this district has a double-track railway at its disposal. The same facilities were also available for the reserve army corps, formed at the time of mobilization.

No less than 18 double-line bridges were, at the time of the beginning of the war, provided for the crossing of the Rhine. Eight to ten cavalry divisions can be conveyed from the Rhine westward simultaneously with the army corps above referred to. Four brigades with the requisite contingent of cavalry and artillery require 96 trains. All of this number of trains could be dispatched in the same general direction in 12 hours. It was thus possible in August, 1914, to effect the whole transport to the western frontier in about 20 hours. The transport of these troops began on the second day of mobilization, August 3, in the evening. It was completed at noon on August 4. During the night the frontier was passed. Liege was assaulted on August 5 and 6.

For the transportation of troops from the western to the eastern front 6 double-track railways were available. The distance from Maubeuge on the west to Konigsberg, just short of the Russian frontier on the northeast, is 994 miles. A military train ordinarily makes about 250 miles in 24 hours. The journey, then, occupied about four days. For the transport of 6 army corps of 40,000 men each, a week was generally allowed. The transportation of this number of men required 124 trains and two or three days were consumed in the necessary preparation.

The limited amount of double trackage in this country would make impossible any similar movements except in a few sections of the country, for distances which, though absolutely as great as can be made within the whole German Empire, would be comparatively small when the extent of this country is considered. Nor would double trackage alone, even in Germany, have been sufficient to make the movement possible. The sufficiency of trackage is only one item. Its provision and the entire equipment and organization for its operation, even to a knowledge of what orders would be given under any set of circumstances, have been a subject of expert study and preparation there for 40 years.

During the last twenty months transportation facilities in England and France have been put to a severe test. Apparently they have served their purpose. The chairman of the London & Southwestern Railway stated in February, 1915, that the movement of military and naval organizations had involved up to that time the running of 15,000 special trains. He also said trains had always been ready for the troops and had arrived on or before schedule time. Because of its location the Southwestern has had a large share of the transportation; but several of the other lines reported at about the same date that they had operated from 3,000 to 8,000 special trains in this service. The British transportation service during this war has doubtless owed much of its efficiency to the arrangements entered into between the government and the railways under an act of parliament passed in 1871. The government board is in control of all railway service, but the actual operation in each case is by the railway's own officials.

In France the army took over the entire railway system, absorbing its personnel in the army under direct command of army officers.

RAILWAYS OF GERMANY¹

Immediately after 1879, Prussia rapidly bought up all the more important lines, and within a few years the state more than trebled its railway property, as is apparent from the ensuing table:—

Mileage of Railways of Prussia

	State Railways Kilometres	Private Railways Kilometres	Total
1879.....	6,323.6	13,650.1	19,973.7
1880.....	11,455.3	8,893.1	20,348.4
1881.....	11,584.6	9,159.2	20,743.8
1882.....	14,825.6	6,329.8	21,155.4
1883.....	15,301.1	6,604.2	21,905.3
1884.....	19,766.9	3,002.6	22,769.5
1885.....	21,138.4	2,496.6	23,635.0

From the foregoing figures we see that the state turned in five years from a small railway manager and owner to a railway monopolist. As a rule the state as a monopolist is unprogressive and unenterprising, *vide* our own post office. But the Prussian government did not go to sleep once it had acquired the railways. On the contrary it extended them most energetically, as the following figures prove:—

Mileage of Prussian State Railways

	Kilometres
1886-1887.....	21,746.1
1891-1892.....	25,206.3
1896-1897.....	27,691.1
1902.....	31,341.8

If we now compare the growth of all the German railways since 1886, when the state possessed practically the railway monopoly, with the growth of British railways during the same time, we arrive at the following remarkable results:—

German Railways

	Kilometres
1880.....	33,411
1902.....	51,964

Increase + 18,553
" + 55.5%

British Railways

	Miles
1880.....	17,933
1902.....	22,152

Increase + 4,219
" + 23.6%

¹ By O. Eltzbacher. *Contemporary Review*. 87: 174-92. February, 1905.

These figures show that the German railways have, under state ownership, grown more than twice more quickly than have those of Great Britain under private ownership. It might, of course, be objected that in densely-populated Great Britain there was no more room for the extension of railways. But that argument should be used with caution, for we find that Germany has now about six thousand miles more railways than has Great Britain, and, according to the German statistics, there are now 9.5 kilometres of railway per ten thousand inhabitants in Germany, whilst there are only 8.6 kilometres of railway per ten thousand inhabitants in this country. Measured in proportion to the population, the railway net of Germany is now 10 per cent denser than that of Great Britain.

The activity and progressiveness of a railway system is apparent not only in its length and extension, but also in its equipment. The magnificent palatial railway stations of Germany, which form such a strange contrast with the mean, dirty and cramped railway stations of this country are well known. But it is not so well known how rapidly the rolling-stock on these lines has increased since the year when almost the whole of them were brought into the possession of the state. Therefore, the following figures may be of interest:—

	Loco- tives	Passenger Cars	Freight and Luggage Cars
1879	7,152	10,828	148,491
1884-1885	8,367	13,063	174,157
1889-1890	9,425	15,177	194,705
1894-1895	10,991	18,391	231,266
1900-1901	13,267	24,225	303,364

During the twenty years following the creation of the state railways, the rolling-stock of the country has been more than doubled. Improved material has been introduced everywhere, traveling has become infinitely more comfortable and more rapid on the state railways than it ever was on the old private lines, and owing to the introduction of more powerful engines, larger freight cars, etc., haulage has become far more economical and efficient. Goods-trains, in Germany, convey, as a rule, more than twice the weight which they carry in this country, but an exact comparison cannot be made, because our railways do not publish ton-mile statistics which would glaringly show up their inefficiency. Whilst the most common truck in Great Britain holds

about 8 tons, that mostly used in Germany carries 15 tons. Therefore, the German goods-trains haul a smaller dead-weight, and are consequently much more economical than are English toy trains pulled by toy engines, and composed of insufficiently loaded toy trucks.

How marvellously the freight and passenger business on the German railways has expanded since they came into the possession of the state may be seen from the following statistics, which show that, whilst the mileage of the railways has grown within twenty years by one quarter, and whilst the rolling-stock has been doubled, passenger and freight traffics have more than trebled.

	Passenger Kilometres	Ton Kilometres
1879	3,797,172,000	8,644,625,000
1884-1885	5,083,700,000	12,414,712,000
1889-1890	6,903,526,000	16,142,648,000
1894-1895	8,763,723,000	18,162,727,000
1900	14,310,204,000	27,434,536,000

Although the wages of the German railway servants have considerably risen all round, and although, at the same time, freight and passenger charges have been lowered all round, as will be seen in the course of this article, the financial result of the state railways has become more satisfactory from year to year, largely owing to good management. The following have been the profits earned on the total capital of all the railways of Prussia :—

Private Railway Average

1869.....	6.5 per cent.
1874.....	4.4 per cent.
1879.....	4.9 per cent.

State Railway Average

1884-1885.....	4.9 per cent.
1889-1890.....	6.2 per cent.
1894-1895.....	5.6 per cent.
1900	7.0 per cent.

Whilst under private management the railway profits were stagnant, or, rather, retrogressive, but they became rapidly progressive after the railways had, in 1879, been taken over by the state. A profit of 7 per cent on the whole railway capital is a result of which an English railway director might, perhaps, dream, but would not think, for the net receipts of all the British railways have fluctuated for so many years between 3 and 4 per

cent that 4 per cent appears now an ideally high return on the total British railway capital. As Prussia borrowed the money with which she bought the railways by means of loans, which return about $3\frac{1}{2}$ per cent, the state makes every year on its railways an immense profit, which flows into its exchequer. Prussia has a state debt of £351,335,500, and the net earnings of the state railways for 1903 not only sufficed for making the necessary provision for the interest on the whole on the national debt and for its redemption, but left over and above that sum a clear balance to the state of £10,195,500, which went to the relief of taxation.

The railway-using public, all the world over, desires, chiefly, that the conveyance of passengers and goods should be quick, convenient, punctual, equitable and cheap. These five requirements are well fulfilled by the German state railways. Although a few show trains on British lines are still faster than are the show trains on German lines, the average speed of passenger trains is, according to a high German authority, considerably greater in Germany than it is in Great Britain. The German lines are no doubt more convenient than our own lines, owing to the unity and uniformity of their traffic arrangements, trains, time-tables, etc. Tickets issued from one town to another are, as a rule, available on the different lines connecting the two towns, and if a traveller should choose a roundabout way, he will not be told, "Your ticket is not available on this line," for the German railways are, for all practical purposes, one line. In Great Britain it requires years of travel and of careful observation to learn one's way across the country and its numerous lines, and to avoid the many pitfalls which are everywhere placed in the way of the inexperienced traveller. In Germany, such pitfalls do not exist, and the greatest simpleton will travel as cheaply, as comfortably, and as rapidly all over the country as will the most cunning commercial traveller. On many British lines, and especially on those South of London, trains appear to be late on principle. In Germany, railway trains arrive, nineteen times out of twenty, to the minute, because the government punishes severely those who are responsible for delay.

The German state railways have largely contributed to the prosperity of the German industries; the British railways have largely contributed to the decay of the British industries. In Germany, trade policy is made by the trade; in Great Britain it is

made by the railways, which, without consulting the trade, prescribe its course, stimulating it here, and stifling it there. But the greatest injustice under which the British producer suffers is that the British railways are allowed to convey foreign produce more cheaply than they carry British produce, whereby they directly subsidise the foreigner to the harm of the native producer. They purposely support foreign industries on the board principle, "On British produce we charge what we can, on foreign produce what we may; British produce has to come to us, foreign produce has to be attracted." Unfortunately, redress for those who are injured by this nefarious policy is very difficult, very costly and almost impossible, in view of the secrecy of railway charges. In Germany such outrageous conduct would be impossible, even on the part of the few private railways still existing.

Whilst in this country the railways raise fares and freights at every opportunity, the fares and freight charges of the German state railways are steadily going down, as the following figures show:—

Receipts of the German Railways, per Ton per Kilometre

	Goods by fast train	Goods by ordinary train
1893.....	24.47 pfennigs	3.79 pfennigs
1896.....	24.09 pfennigs	3.79 pfennigs
1899.....	21.75 pfennigs	3.57 pfennigs
1902.....	17.01 pfennigs	3.52 pfennigs

If we now look into the earnings of the German railways on their passenger traffic, we find the following figures, which also show a decrease of charges:—

Receipts of the German Railways, per Passenger per Kilometre

	1st class	2d class	3d class	4th class
1893.....	7.87 pfennigs	4.96 pfennigs	2.94 pfennigs	1.99 pfennigs
1896.....	7.94 pfennigs	4.71 pfennigs	2.76 pfennigs	1.98 pfennigs
1899.....	7.75 pfennigs	4.66 pfennigs	2.69 pfennigs	1.96 pfennigs
1902.....	7.33 pfennigs	4.48 pfennigs	2.67 pfennigs	1.89 pfennigs

In Great Britain the maximum charge for third-class travelling is 1d. per mile, and a glance at any railway guide, such as the A B C Guide, will show that the British railways charge, in nine cases out of ten, the full maximum rate. In Germany the lowest class is the fourth class, where the average charge is little more than $\frac{1}{3}$ d per mile, whilst the charge for third class is about $\frac{1}{2}$ d per mile. It is also worth noting that in Germany travelling

first class is comparatively very much dearer than it is in England. On an average it costs in that country about three times more to travel first class than third class, and about four times more than it costs to travel fourth class. But in Great Britain travelling first class usually is only about twice dearer than it is to travel third class. In Germany the poor man travels cheaply, whilst in England the rich man travels cheaply.

The German states pursue a truly national railway policy. Railways are built where they are wanted by the population or by the state even if they do not pay, for the German state considers itself as the servant of the nation and as the trustee of its interests, and not the nation as the milch-cow of the railway department. Hence, the German states have encouraged the building of canals in every way, and the tolls charged for their use are so low that the government loses about a million sterling per annum on its canals. Again, the German government has in no way interfered with the building of electric trams, whilst the railways in the classical country of freedom and non-interference have nefariously closed the canals and obstructed the building of electric tramways, in order to deprive trade which wished to escape strangulation of an alternative outlet.

PRUSSIAN RAILWAY ADMINISTRATION¹

Financial Results

The capitalization of the Prussian-Hessian system, about \$1,952,750,000 in 1899, amounted in 1905 to \$2,225,000,000, about \$105,800 per mile. The average net profits amounted in 1903-4 to 7.12 per cent and in 1904-5 to 7.17 per cent of the capitalization. The excess of earnings over disbursements, which has amounted each year since 1894 to \$100,000,000 or more, is applied, first, to pay the interest on the railway debt; then, except that a small sum (\$500,000) may be used to meet any deficit in the ordinary state budget, the next claim is three-quarters of one per cent of the total railway debt not the unextinguished portion) for a sinking fund; then, any balance may be invested in new lines or be paid to the government for general expenses. From 1881 to 1899 \$350,000,000 was so turned over to the government. For the year 1904-5 the net profits amounted to \$158,190,000.

¹ By Ernest S. Bradford, economist. *Annals of the American Academy.* 29: 310-22, March, 1907.

General Conclusion

"The results of the nationalization of the railroads in Prussia have been highly satisfactory," says Prof. Emory R. Johnson, "particularly in its financial results." Its success has been due in no small part to the well articulated, flexible and elastic system of administration. A definite head, well defined control and responsibility all the way down from minister to depotmaster, with shippers in close touch with the railway management, result in rates which change with the changing needs of commerce, and in a service adequate for Germany. Preferential rates whenever granted are granted openly, after full and public discussion; there are no secret rebates. Prussia has satisfactorily solved the problem of government ownership. Would the United States be as successful?

FIRST DECADE OF THE SWISS FEDERAL RAILWAYS¹

Probably the fairest procedure for determining the measure of success obtained by the Swiss government in the railway business is to ascertain first what it aimed to accomplish. The arguments advanced by the Federal Council in advocacy of public ownership were as follows:

1. The desirability of consolidating the independent railway lines of Switzerland in order (a) to save the expenses of the superfluous company and general managers' offices, (b) to secure the advantages of monopoly and organization on a larger scale in equipment and maintenance of way, and in operation and the security of traffic, and (c) to improve the local service by the more generous employment of the profits on the profitable portions of the business for the extension of the service into less profitable places.

2. The reduction of fixed charges by the substitution of the credit of the government for that of the private companies.

3. The application of net profits to the amortization of capital until the entire railway system should be owned clear of debt, thus eventually making possible a great reduction of rates (France, Germany, and Austria, it was believed, would be in a similar position by the middle of the twentieth century).

¹ By A. N. Holcombe. *Quarterly Journal of Economics*. 26: 341-62. February, 1912.

4. The abolition of discrimination of all kinds, and the establishment of uniform and just rates (the message intimated that the lowest rate for each class of traffic then in force on any private road would be extended to all the roads to be acquired by the federal government).

5. The more effective representation of the interests of shippers and of the travelling public as opposed to the interests of stockholders in railway management.

6. The improvement of the conditions of employment of the employees (a) by standardizing the various wage scales and labor regulations (the Federal Council intimated that the highest wage scales in force on any of the roads to be acquired would be extended to all of the roads to be acquired), (b) by better enforcement of federal labor legislation than was possible while the lines were under private management, and (c) by maintaining superannuation and other benefit funds on a sound and liberal basis.

7. The elimination of foreign influence from the management of Swiss railways. Apparently in at least three of the leading roads foreign stockholders then held a controlling interest, and such control, in the opinion of the Federal Council, was politically dangerous.

The message of the Federal Council was tinged with a strain of sentiment. There was some appeal to the national pride, which ought to insist upon the popular management of those affairs which are of prime importance to the safety and well-being of the commonwealth, and to the national prejudice, which ought not to tolerate the threatened control of Swiss domestic commerce by aliens. But in the main the Federal Council founded its case upon sober calculations of lower rates and additional facilities for shippers and travelling public, of improved conditions for railway employees, and, of better management generally. The arguments of the Federal Council were tersely summed up by a sympathetic American writer. "The nationalization of the Swiss railroads," he writes, "was inevitable, a natural fruit of the spirit of democracy"; but the "direct efficient cause was business opportunism."

Let us now consider the results of this policy of "business opportunism." In the first place, the political dangers of the alien control of Swiss domestic transportation, whatever they may have been, were definitely removed. So much nationalization

accomplished. Much of the purchase money, to be sure, was borrowed abroad on the credit of the government, but foreign bondholders and foreign stockholders are not of the same genus. The Swiss people by the nationalization of their railways not only assumed the responsibility but obtained the power to manage them in the interests of Swiss shippers, travellers and railway workers. After nationalization, there could be no danger of the exploitation of the Swiss people as a whole. The only possible danger would be that of the exploitation of one class of the people by another. The general public in its political capacity might exploit the railway workers by denying them just compensation and conditions of employment; conversely, the railway workers, by gaining an improper influence over the government of the day, might exploit the general public by obtaining excessive wages at the cost of reasonable rates of transportation. In fact the relations between the state employer and the railway workers have been singularly harmonious and free from friction. The workers have never struck, nor even threatened to strike. The government, on the other hand, has always maintained its authority, and while treating its employees with liberality, has never given them more than could be publicly shown to be their due.

The conditions of employment on the federal railways were regulated by the laws of June 29, 1900, and December 19, 1902. The various grades of employees were classified, and maximum and minimum rates of pay were prescribed for each class. The highest rates paid on any of the private roads were adopted as the minimum rates for the corresponding classes of the federal service. The new rates went into effect May 1, 1903, and each third year thereafter the pay of every employee who had served through the preceding three years was to be increased by three hundred francs until the maximum for the class should be reached. An eleven-hour day was established (which is less than the usual Continental European working-day), with the further provision that every train-crew should have at least ten hours of unbroken rest in each twenty-four, and all other employees at least nine hours. More liberal provision than had previously been the rule was made for a weekly day of rest and for annual vacations. The common laborers shared in the improved conditions of employment, but the most highly paid administrative officers suffered, since in view of the salaries

paid to other officers in the service of the federal government, it was not possible to continue the fancy salaries sometimes paid by the private companies to favored officials. These changes, the improved conditions of employment even more than the higher wages, tended to increase the operating expenses of the federal railways; but they had been practically promised in advance, and their probable cost had been reckoned with by the advocates of nationalization.

The labor policy of the Swiss railway management is revealed by the conduct of the employees when the pressure of the recent increase in the cost of living began to be felt. The standard wage scale was established upon the basis of the general level of prices and wages in 1899. Since then the rise in the general level of prices has been world-wide. According to Calwer's index number, which most adequately portrays the monetary situation in Switzerland, the rise in the cost of living from 1899 to 1907 amounted to 17½ per cent. The highest rate of wages in effect upon the private railways (which were the basis of the governmental rates) had been established in 1896 and the rise in the cost of living since then amounted to over 27 per cent. The men began to complain, respectfully, but during 1906 with increasing vigor. The government, when confronted by the men with family budgets and other pertinent evidence of the fall in real wages, recognized the justice of their claims, but wished to postpone the revision of their wages until a general act could be prepared that would apply to all federal employees. In December, 1906, the Union of Postal, Telegraph, and Customs Officials, the Union of Swiss Transportation Laborers, and the Union of Swiss Transportation Officials simultaneously petitioned the Federal Assembly for a special supplement to their regular wage during the year sufficient to compensate them for the increase in the cost of living. The Federal Council ultimately recommended that each married employee and each unmarried employee with persons dependent upon him for support, earning less than 4000 francs a year, should receive a supplement to his annual earnings of 100 francs; and that all other employees earning less than 4000 francs should receive 50 francs. The Federal Council took pains in its message to the Assembly to remark on the courteous tone of the employees' petitions and the reasonableness of their request. The payment of this "high-prices increment" was repeated in 1907 and 1908. In 1909 the

scope of the extra payment was extended, and finally a law of June 23, 1910, revised the classification of railway employees and established a general and permanent increase of wages.

This incident in itself is not perhaps of great importance, but it illustrates the good understanding that prevails between the railway management and its employees. The influence which the latter exert in order to bring about an improvement of their conditions of employment has no unhealthy effect upon Swiss politics. It is not so strong as to subordinate the good of the service to their private advantage, and yet strong enough to secure the prompt recognition of their just claims. Nor has governmental management brought with it an extravagant over-manning of the roads. The rate of increase in the number of employees on the federal railways up to the end of 1908 was less than the increase during the same period on the St. Gothard, which remained under private management until the following year, although the rate of development of traffic was greater on the federal lines than on the St. Gothard. The total number of employees at the end of 1909 was 34,575, and there is absolutely no evidence of "politics" in the management. Suitable provision is made for insurance against sickness and accident, pensions are provided in the event of any chronic infirmity or old age, and the organization of labor is provided by the management itself. Thus public ownership has brought with it the adoption of methods that recognize the mutuality and solidarity of labor, and convert the craving for combination and mutual support, so characteristic of modern wage-earners, into a productive asset.

As soon as the government had gained control of a sufficient number of lines, it proceeded to fulfill its pledges with regard to rates. . . . The law provided an elastic process of rate making for service in the future. Increases or cancellations of rates require three months' advance notice, but the period may be shortened, if material reductions accompany increases of rates, or if international through rates are increased on the external portion of the route only. Reductions of passenger rates must remain in effect at least three months, and of freight rates at least one year, but reductions may be granted for shorter periods if the period is stipulated in advance. These restrictions do not apply to excursion rates. Thus the public enjoys complete security against unfair discrimination (for there never have been any charges of secret rebating or criminal collusion between

railway officials and favored shippers), without unduly restricting the power of the federal railways to adapt their charges to special conditions.

The law of July 27, 1901, not only established a satisfactory system of rate making, but also provided for the redemption of the pledges for improved service. The number and speed of trains and the supply of rolling-stock has been increased, terminal facilities have been improved, and ways more solidly maintained. The reports of the chambers of commerce of Swiss cities and of other bodies authorized to speak in the name of the economic interest of the country are full enough of specific criticisms of the service and suggestions for its improvement, but there is no disposition to disparage the capacity of the railway administration or to condemn its conduct of affairs.

There has been a wide spread impression in recent years, both in Switzerland and elsewhere, that the federal railways have proved a financial failure. This impression is founded largely upon the annual official budgets. Each year since the revised rates of wages and passenger and freight tariffs were put into effect, the railway management itself has estimated that the next year would close with a deficit. Thus in a sense it is true that the federal railways year after year have been having to face deficits. These deficits, however, have been more apparent than real. The actual financial results have regularly been more favorable than the budgetary estimates with the single exception of the year 1909, and the federal railways have regularly earned a surplus over and above the amount required for the interest and amortization charges except in the two years 1908 and 1909. This is indicated by the following table, computed from the official reports, showing in parallel columns the estimated deficits and the actual results.

Year	Profit (+) or loss (—) as estimated in budget	Profit (+) or loss (—) actually resulting
1902.....	.....	+4,442,420
1903.....	.....	+1,030,682
1904.....	— 1,209,725	+ 60,735
1905.....	— 2,088,400	+ 651,734
1906.....	— 4,660,350	+2,548,523
1907.....	— 2,528,527	+ 429,812
1908.....	— 2,498,790	—5,823,166
1909.....	—10,927,330	—4,091,020
1910.....	— 9,125,000	+7,948,758

Some of these figures are not the same as the corresponding figures in the official budgets and reports. The official budgets do not include with the regular estimates for the year any estimate of the so-called "high-prices-increments" paid since 1906 to the railway employees. Beginning with 1907, I have included such an estimate, based on the sum actually so paid in the preceding year. The official reports often carry over surpluses or deficits into the accounts of the ensuing year, where they serve to conceal the true result of that year's operations. Thus the report for 1910 states the result of the year's operations to be a deficit of 1,535,616 francs, whereas in fact the result was to diminish the accumulated deficits of the two preceding years by the amount shown in the table, that is, the largest surplus in the history of the federal railways. Taking the results of the entire operations up to the end of the decade, the surpluses exceed the deficits. Since, however, a portion of the earlier surpluses were employed for extraordinary amortizations, the official balance sheet at the end of 1910 showed a net deficit of one and a half million francs on the eight years' operations, or a little more than one-tenth of one per cent of the present funded debt of the federal railways. The amortization charges for a single year, which are a species of profit, would wipe out this deficit several times over. Since all interest and amortization charges have regularly been paid, this nominal deficit may be disregarded. Indeed it should have been wiped out by the results of the first quarter's operations in 1911. So near an approach to the ideal zero of surplus profits must be considered a sufficient disproof of the charge of financial failure.

The second decade of the Swiss federal railways begins auspiciously with an estimated surplus, the first budgetary surplus since the government's policies have been in effect. The truth is that the Swiss federal railway management is to be highly commended for its energetic and sagacious handling of a difficult situation. In any undertaking in which the margin of profit is calculated so closely as in the Swiss federal railways, abnormal conditions may temporarily produce abnormal profits or losses; but over longer periods of time these should offset one another. There is no reason why the equilibrium between income and outgo should not be permanent.

Our examination of the financial history of the Swiss federal railways leads us to certain definite conclusions. Mr. McPherson's statement that the railways have become a drain upon the

tax-payers is not supported by the evidence. For Mr. Vrooman's prediction, on the other hand, that the existing railways will have paid for themselves out of profits in about sixty years, there is substantial foundation in the record of governmental management. Without venturing, however, to predict, we may observe that the Swiss federal railways have already reduced rates, improved the service, raised wages and made a profit. In short, the evidence of the first decade of the Swiss federal railways is that the policy of "business opportunism" is justifying itself.

GOVERNMENT RAILWAYS IN AUSTRALIA¹

The following figures, as far as they apply to Australia, constitute part of the elaborate and carefully audited balance-sheet for 1907, published by every state-railway system in the Australian Commonwealth. I owe them, as well as the comparative figures for other countries, to the kindness of the government statist of the Commonwealth, who has been good enough to furnish them to me in advance of publication and has thus saved me the enormous labor of extracting and combining them. These then are the true facts:

Country ²	Capital Cost per Mile, £	Net Return on Capital Cost, Per cent	Work- ing Ex- penses, Per- centage of Gross Reve- nue, Per cent	Per Train Mile		
				Gross Reve- nue, Pence	Work- ing Ex- penses, Pence	Net Rev- enue, Pence
Australian Common- wealth	9,669	4.35	57.18	86.57	49.50	37.07
Great Britain and Ireland	55,798	3.45	67.21	62.73	42.17	20.56
United States	13,735	5.01	66.77	99.00	66.10	32.9
Canada	12,994	2.87	69.52	89.50	62.25	27.25
	Mileage Open for Traffic		Per Mile Open for Traffic		Area in Square Miles	
					Popu- lation	
Australian Commonwealth .	14,190		200.9		281	
Great Britain and Ireland..	23,063		5.26		1,912	
United States	217,341		13.6		387	
Canada	21,353		175.4		290	
					Killed and Injured	
Australian Commonwealth .					0.168	
Great Britain and Ireland..					0.065	
United States					0.438	
Canada					0.065	

¹ By Max Hirsch. Public. 11: 103-5. May 1, 1908.

² Australian Commonwealth for 1907. Great Britain and Ireland, and Canada, for 1906, except that "Killed and Injured" is for 1905. United States for 1905.

³ Not available.

	Working Expenses	Interest Charge	Net Revenue	Surplus Over Working Expenses and Interest Charges
Commonwealth...	£7,968,374	£4,975,341	£5,968,288	£992,947

The foregoing figures show that the net returns from the Australian state railways is higher than those from the privately owned railway systems of the United Kingdom of Great Britain and Ireland, and of Canada, and approximates very closely to that of the railways of the United States.

If, then, the Australian system is "really bankrupt," those of Canada and the United Kingdom are worse than bankrupt, and that of the United States is nearly so. Yet they are privately owned.

Moreover the Australian system shows the lowest percentage of working expenses and the highest revenue per train mile; it shows a smaller percentage of accident than the United States, and, crowning glory of all, its cost of construction per mile is lower, much lower, than that of any of the privately owned systems with which it is here compared.

GOVERNMENT-OWNED RAILWAYS OF NEW ZEALAND¹

The opportunity was afforded me during a recent visit to the United Kingdom to note by comparison the operation of private-owned and government operated railways under the British flag. Britain with a contributing population of 45,000,000, limited to an area of but little greater than that of New Zealand, under the avaricious hand of private-ownership, over-capitalization and combined pools of earnings, pays in passenger fares a very much larger tariff than is paid on the New Zealand government railways, notwithstanding the great disparity in contributing population.

A comparison of the English roadbed and speed of trains is vastly favorable to the English railway system; not to be wondered at however, when we know that the first use of rails for the purpose of reducing the traction of vehicles dates back

¹ By A. A. Brown. Arena. 38: 113-17. August, 1907.

to the year 1633, and the first use of iron rails dates back to 1801. Considerably more than a century, therefore, has been devoted to the perfection of the roadbeds of Britain and the perfecting of its rolling stock. In comparison with the latter, however, the New Zealand railways are more comfortable and decidedly more cleanly. In England as elsewhere private-ownership of railways has ever used the now exploded argument of competition to prove the efficacy of its case, the fallacy of which can best be shown by presenting comparative rates charged for ordinary travel on the New Zealand government railways with rates for like distances on English lines between points enjoining the benefits of "keen competition" and heavy passenger traffic.

*Extract from Table Prepared by Hon. Sir J. G. Ward,
Minister of Railways*

	Miles	First	Second	First	Second
		Single	Single	Return	Return
		s. d.	s. d.	s. d.	s. d.
From London to Glasgow.....	402	58 0	33 0	110 3	62 11
New Zealand (same distance)..		37 5	20 4	74 10	40 8
London to Edinburgh.....	392	57 6	32 8	109 6	62 8
New Zealand (same distance)..		36 7	19 11	73 2	39 10
London to Carlisle.....	300	40 6	24 2	81 0	48 5
New Zealand (same distance)..		28 3	15 9	56 6	31 6
London to Liverpool.....	202	29 0	16 6	58 0	33 0
New Zealand (same distance)..		20 1	11 8	40 2	23 4
London to York.....	189	27 0	15 8	54 0	31 4
New Zealand (same distance)..		19 0	11 1	38 0	22 2

Let me put these figures in another form, perhaps more easily understood by the American reader. The New Zealander can travel 450 miles first class and 500 miles second class for the same rate that is paid by the Londoner to Carlisle, a journey of but 300 miles. Once more—the Londoner pays 33s. second class to Glasgow, a distance of 402 miles; for the same fare the New Zealander can travel 716 miles. Such figures, taken as they are from the official tables of rates, thoroughly explode the theory of cheapness to the public by private-ownership of railways.

Interlinked with the New Zealand railways is the progress of the colony, the convenience, prosperity and happiness of its people, and the incalculable and unmeasurable benefits that can be bestowed by a fraternal government to the people for whom

the government incorruptibly stands. Closely allied to the advancement of education we find the government railways enlisted in the work of carrying the children of parents residing in remote and unsettled districts to and from the public schools for all distances up to 60 miles free, that the benefits of education might not be denied to the children of the pioneer, and workmen are granted weekly tickets enabling them to travel one way each day for six days every week at the very infinitesimal charge of 2d. (four cents) per trip for all distances from 3 to 10 miles, while the farmer and the orchardist have the free use of the railways up to a distance of 100 miles for the delivery to them of lime for manuring and increasing the productiveness of their lands, while the charge beyond the limit of 100 miles is too low to force an argument. Can you, American farmer, ever dream of such concessions while the railways of the United States are under the control and dominion of financial harpies whose sympathy with the people and their equitable demands finds fullest expression in Vanderbilt's historic: "The public be damned!"

The state has not contented itself with making concessions in fares and freights to the users of the colony's railways, but it has from time to time shown in a practical manner that it recognizes that the laborer is worthy of his hire, and has given to railway servants of all grades tangible recognition of their services in improved classification and pay. The practical nature of the recognition is shown by the fact that the increases in pay granted to the railway staff during the past nine years have amounted on the lowest estimate to no less than £365,000. In other words, the state railways have given to the public in the form of concessions, and to the employees in increased salaries, over one million pounds.

Not only is the workman well cared for during the years of his usefulness but a superannuation scheme is provided for the benefit of those who retire from time to time through ill health or old age, and in the case of death of an employee by accident or other cause before reaching the year of his retirement, his widow receives an allowance during her widowhood of £18 (\$90) per annum, with a further payment of 5s. (\$1.25) per week in respect of each child under 14 years of age.

The value of government-ownership of railways is a subject of inexhaustible merits incorporating within a full discussion the

whole economic fabric of government function; the duty of a government to the people it for the time represents, and as the history of all state-owned lines testifies to administration clearly in the interest of every citizen alike, without favors to the strong and powerful against the weak and helpless and without secret and illegal rebates, discriminations, preferentions, and drawbacks in favor of interested monopolists, as against the individual shipper.

It means that every citizen receives equal treatment and pays exactly the same rates for equal or the same service. It is the duty of the state to employ the railways as an adjunct to the development of the colony; the settlement of the people on the land; the employment of labor for the betterment of the state; the increasing of opportunities to the producer; the creation of markets for the agriculturalist; the convenience of a people at a minimum cost; the rights of a people equitably maintained. It means equality of opportunity, freedom from political corruption, integrity in management. It means the employment of a great public utility for the sole benefit of the public, entirely removed from private interests for private gain.

NEGATIVE DISCUSSION

THE RAILROADS AND THE PUBLIC—A NATIONAL PROBLEM¹

The people of the United States make greater use of their railroads than is the case in any other important country, as the following table shows:

Number of Tons Moved One Mile per Capita per Annum

United Kingdom	286	Germany	582
Austria-Hungary	318	United States	2,737
France	365		

This is partly because of the greater area and rich natural resources of the United States, but chiefly because the freight rates here are so low that the difference in cost of transportation may be and often is more than offset by the natural advantages of certain regions or localities, thus making it more economical to procure our coal, ore, lumber, grain, etc., where the superior natural advantages or conditions give the lowest initial cost, disregarding largely the element of distance.

The American railway system, taken as a whole, during the fiscal year ended June 30, 1913, carried 2,058,035,487 tons of freight an average distance of 146.59 miles, and received for so doing \$2,198,930,565, equal to 7.29 mills per ton mile. During the same year 1,033,679,680 passengers were carried an average distance of 33.58 miles each, for a total sum of \$695,987,817, or 2.008 cents per mile. The aggregate earnings of all the railroads for the year above mentioned were \$3,125,135,798 and the total operating expenses for the same period were \$2,182,769,000. More than 1,800,000 men and women are employed by these carriers with an annual payroll of \$1,373,000,000. The total cost of these roads as represented by "property investment" account on June 30, 1913, was approximately \$16,000,000,000.

¹ From an address to the students of Dartmouth College, Hanover, N. H., March 22, 1915, by Daniel Willard, president of the Baltimore and Ohio. *Railway Age Gazette*. 58: 703-6. March 26, 1915.

Not Overcapitalized

The following table shows comparative cost per mile of railways in leading European countries and the United States:

United States	65,681 (1913)	Switzerland	\$120,950 (1911)
Belgium	190,914 (1911)	Germany	116,662 (1912)
France	148,625 (1911)	Austria-Hungary ..	96,033 (1911)
Italy	126,886 (1911)	United States	65,681 (1913)

Notwithstanding the statement so often made in the past, but much less frequently at present, that our American railroads are over-capitalized, it will be seen from the figures just given that the average capitalization or cost per mile of the roads in the European countries mentioned, is more than double what it is in the United States. This is due largely to the fact that it has been the general custom in this country to make many additions to the properties from current earnings—that is to say, from the surplus earnings from year to year that might otherwise have been distributed to the stockholders as dividends.

The railroads now pay more than \$130,000,000 per year as taxes, equal to 4.3 per cent of their gross earnings, a sum, by the way, more than two and one-half times as much as the government pays all the railroads for carrying the mails.

Problem of Regulation

The figures quoted indicate to some extent the magnitude of the undertaking which has been built up with private capital and is now devoted to public use, and on that account subject to public regulation. A policy of regulation dealing wisely and well with such a problem must, in the broader interest of all, give just consideration to the rights of all. A selfish policy, were it possible, either in the interest of the 1,500,000 security holders or of the 1,800,000 employees of the American railroads would soon cause general dissatisfaction, which in turn would find expression in laws framed to punish as well as to correct. A policy intent only or chiefly upon securing lower and still lower rates, as is sometimes urged, regardless of the rights of those whose money has made the roads possible, will inevitably fail because new capital could not be obtained under such conditions, railroad growth would stop and all industry would suffer. The Interstate Commerce Commission has said truly that "The means of transportation are fundamental and in-

dispensable agencies in our industrial life and for the common weal should be kept abreast of public requirements."

It is the function of regulation to so evenly balance the conflicting claims of the many that the just rights of all shall be properly conserved. Certainly this presents a most intricate problem, but in my opinion one by no means impossible of solution. Since the Interstate Commerce Commission has been in existence, it has handed down a large number of opinions or decisions, and in these decisions may be seen the gradual unfolding of our federal policy of railroad regulation. I shall discuss chiefly federal regulation, because the steam locomotive and the electric telegraph and telephone have in effect eliminated state boundaries in a commercial sense, and state regulation of the agencies of commerce must on that account yield largely to federal regulation and control.

Federal Policy of Regulation

The two decisions of the Interstate Commerce Commission in the so-called Five Per Cent Rate Case contain the essentials of a bill of rights for the roads. In these decisions and in support of what I have just said is to be found the following language:

The proceeding before us may therefore be described as, in some sense, a controversy between the consuming public which pays the rates, and the investor who furnishes the facilities for moving the freight; and our duty is to ascertain from the record before us what are their respective rights. That, in fact, is the real railroad question—the just balancing of the mutual rights of the public and of the carriers under a national policy that permits and invites the performance of this public function by private interests. From that point of view the problems and difficulties of our railroad become public problems of great national concern. . .

The public interest demands not only the adequate maintenance of existing railroads, but a constant increase of our transportation facilities to keep pace with the growth and requirements of our commerce. If, however, that development is to be accomplished with private capital, in conformity with our traditions, nothing can be more certain than that the facilities will not be provided except under such a system of regulation as will reasonably permit a fair return on the money invested.

In harmony with the policy indicated in the general statements just read, the commission, after considering all the testimony presented, said further—

In view of a tendency towards a diminishing net operating income as shown by the facts described we are of opinion that the net operating

income of the railroads in official classification territory, taken as a whole, is smaller than is demanded in the interest of both the general public and the railroads; and it is our duty and our purpose to aid, so far as we legally may, in the solution of the problem as to the course that the carriers may pursue to meet the situation.

Speaking more definitely in the same connection the commission also said:

There can be no doubt upon the record that the carriers in central freight association territory ought, in the public interest, to have as much additional revenue as would be produced by a five per cent increase, as modified herein, and possibly more. . . . The traveling public is giving expression to its demands for better service, better accommodations, and for the adoption by carriers of all the devices that make for safety. A public that demands such a service can not reasonably object to the payment of a reasonable compensation therefor.

The commission also suggested certain reforms and changes of practice which it was thought would tend to augment net revenues.

In the decisions or opinions in the Five Per Cent Case from which I have just quoted, may be found not only a clear statement of the railroad problem of today as defined by the commission, but also a recognition of the principles essential to and sufficient for its satisfactory solution. The commission concedes and asserts:

That there is in this country a fundamental need of adequate transportation facilities.

That such facilities during the continuance of present economic conditions can only be had by means of private capital, combined with private enterprise.

That private capital can only be obtained by the hope and realization of fair and reasonable return.

That to produce such return, freight rates may be raised, when it is shown that existing rates as a whole yield inadequate revenue, and that the higher rates proposed would be reasonable.

That such reasonable passenger fares may be charged as will yield a fair return on the property devoted to passenger use, and further—that in general each class of service, including the mail and express, should contribute its just proportion to the total economic cost of operation.

By economic cost of operation I mean all costs, including the interest or dividends paid for the use of capital invested in the plant.

The foregoing principles have been contended for by the carriers; they have been clearly and freely admitted by the commission in the Five Per Cent Rate Case, and I believe when the matter is clearly understood will be just as freely granted by the general public, because I believe the public when correctly informed will be fair.

The Labor Problem

The relations between the railroad and the shipper have, as I have shown, been very clearly defined and established, but no authoritative word has yet been spoken concerning the relations between the railroad and its employees, or between railroad employees and the public. When it is recalled that the total number of railroad employees in the United States is roundly 1,800,000, or about one-tenth of the entire voting population, and that 44 cents out of every dollar earned by the railroads, equal to \$1,373,830,589 per annum, goes directly to pay labor, the magnitude of this phase of the railroad question becomes apparent.

I shall not enlarge upon this particular matter, but any discussion of the railroad question which ignored this feature would be incomplete, and any forecast of the future of the railroads which fails to take this matter fully into account will also be incomplete and unreliable. Railroad employees or many of them are required to perform duties of a more or less hazardous nature, and they are also called upon frequently to think and act quickly and to use good judgment. As a whole there is, in my opinion, no better or more worthy class of men to be found anywhere or in any employment. They are semi-public servants and as a rule serve the public well, and deserve well of the public. All this, however, should not blind the public to the fact that all elements of cost, including wages, must finally be reflected in the freight and passenger rates which the public must pay. The railroad has no other sources of revenue.

Enlarge and Reorganize the I. C. C.

If the principles established in the Five Per Cent Case be generally accepted, and actually made the basis of our national policy of railroad regulation, I feel confident that the problem of how best to provide adequate service at reasonable rates will be satisfactorily worked out under the present plan of pri-

vate ownership with government control, but I also believe that before this result can be fully realized, the interstate commerce law must be amended. The Interstate Commerce Commission should be enlarged and reorganized and its powers so broadened that it may be able to deal promptly and effectively with the various matters under its jurisdiction. It is not able to do so at the present time. The interstate commerce law as it is today reflects the influence in the past of a nation-wide demand upon Congress to enact a law or laws which should primarily be sufficient to protect the public from the assumed greed of the railroads, and to that end the commission has been given the power among other things to order rate reductions and to prevent rate advances.

It is right that the people should be protected from the selfishness of the railroads, but it is equally important that the railroads be protected from the unreasoning demands of the public. The commission should be given the power to fix the minimum as well as the maximum rate which the railroads may charge. It should be kept in mind that the demands of the growing commerce in this country make necessary an annual expenditure by the railroads for additions and betterments of not less than \$750,000,000. If those having money to invest lose confidence in the stability of railroad securities that fact is immediately reflected in reduced railroad expenditures for additions, betterments and equipment. Such expenditures at the present time I believe are at the lowest point reached in the last fifteen years, and much below the amount necessary to maintain the existing standards of facilities and service, and while the European war has had some effect, the situation was very serious before the war broke out and reflected in no small degree the results of our general policy of railroad regulation, particularly during the last ten years.

The policy referred to has found expression not only in the acts of commissions but in the laws as well—both state and federal. In the year 1913, 1,395 bills, designed to regulate the details of practical railroad operation, were introduced in the legislatures of the various states then in session, and 230 of those bills were enacted into law. The increases in operating expenses and taxes of railroads, due to the causes just mentioned and to wage advances, have more than counterbalanced the economies derived from additional traffic and increased

transportation efficiency, leaving no increased income to apply on the enlarged property investment. No industrial undertaking can thrive, or even continue to exist, under such conditions. If the present plan of private ownership with government regulation should fail because of unwillingness on the part of the public to invest further in railroad securities, it will be no less the fault of those responsible for the policy of regulation than of those responsible for the management of the railways.

Government Ownership

Those who advocate government ownership assert that because of its high financial credit the government would be able to obtain the necessary capital at rates lower than are paid under the existing plan, but no one knows how much lower, or what the actual saving in that respect might be, or how long that condition might continue. The price of government bonds under existing conditions is not a fair measure of what the government might have to pay for money in large amounts and under open competitive conditions. The advocates of government ownership also claim that all special privileges and discriminations would be abolished. That can be easily accomplished under the present plan—in fact, has been. They claim that the government by operating all of the roads as one system could save the unnecessary expense involved in the large number of employees now engaged in soliciting freight and passengers for the different lines. This is true, but it does not necessarily follow that the public would be the gainer thereby. The fact that our freight rates are already the lowest in the world is due very largely to the stimulus of competition, and competition would, of course, cease to exist under the plan discussed.

Beyond question, the railroads in Germany and particularly in the Kingdom of Prussia, are well maintained and well operated, but the freight rates which obtain in that country are much higher than they are in the United States. It is more difficult to make a comparison of passenger rates because the conditions of the passenger service in this country are so unlike the conditions in Continental Europe. However, when consideration is given to the different classes of service and the character of the equipment used, together with the fact that baggage is not carried free on any of the European roads as is

the case in this country, I am convinced that passenger fares upon the average in the United States are no higher than they are upon the average for similar service in Europe. In no country outside of Germany, in my opinion, are the railroads operated and managed as prudently or efficiently under government ownership as is the case in the United States under private ownership with governmental control, and freight rates in the United States are upon the average much lower than those charged in Continental Europe.

Under normal conditions and with present mileage, about 2,000,000 employees would be needed for our railways, with a payroll of approximately \$1,500,000,000 per annum. I doubt seriously the wisdom of placing that additional number of men upon the civil list of the government. I submit that so far the government has not demonstrated its ability to carry on large industrial undertakings better than can be done by private enterprise, and until we have tangible evidence of such superior managerial capacity on the part of the government, I think it would be a most unfortunate mistake to make the change. I do not believe government ownership of railroads in the United States is impending. I do not believe any considerable portion of the people desire it, and I do not expect to see it come unless the present plan should break down because of the unwillingness of investors to put more money in railroad investments.

However, if the principles enunciated in the "Five Per Cent Rate Case" be made the actual basis of our future national policy of railway regulation, and if the powers of the commission be so broadened as to enable it to protect the railways as well as the public, I believe railroad investments will in time become so well established that the necessary new capital can be obtained from private investors at rates, upon the average, not more than one and a half or 2 per cent above the amount which the government would be required to pay. The average rate (interest and dividend) paid in 1913 was 4.3 per cent. As against that, if the people in this country were required to pay the higher freight rates which are charged today by the government-owned railroads of Europe, the increase in freight charges would be more than three times the amount which would be saved by the lower interest rates I have suggested. An increase of only one mill per ton mile above our present average freight rate would mean a difference of more than \$300,000,000

per annum, a larger amount, I believe, than the government could possibly save by lower interest rates due to its superior credit.

The general claim is also made that, for the reasons already mentioned and others, the government could operate the roads better and more cheaply than the present owners and managers, and consequently give still lower freight and passenger rates. Undoubtedly the government could, if it desired, give lower freight and passenger rates because if the total charges collected under government ownership fell short of the amount necessary to pay operating expenses and interest on money invested in the plant, the government could, by the exercise of its power to tax, raise in that way sufficient funds to meet the deficit. We have the example of a similar case in our neighboring country on the north. For the last two years, 1913 and 1914, the Intercolonial Railway of Canada, which is owned by the Canadian government, has failed to earn its operating expenses, and of course has contributed nothing towards the interest upon the \$97,000,000 which that system has cost.

Our post office has been managed in a similar way; that is to say, if there is a deficit, it is taken care of from the general fund raised by taxation.

It should be kept clearly in mind that it is the "economic cost" of transportation which the public is most deeply interested in, rather than the specific rates which may be charged. It is of primary importance that the total economic cost of transportation shall be made as low as is compatible with good service, for while the total cost may be paid wholly in the form of passenger and freight rates, or partly in the form of rates and partly in the form of taxes, in the long run it must all be paid in some form, and in whatever form it is paid, it is a burden on the people, the industry and the commerce of the country which they cannot escape. Rates, of course, may be made as low under government ownership as the people through their government may decide, but the total economic cost of transportation, all of which the public must pay in one form or another, depends upon the manner in which the railways are managed, and not upon the question of ownership.

Now that it has come to be generally recognized that there is a very distinct and intimate relationship between the total economic cost of transportation and the rates which must be

paid, the public should be furnished all of the information that is necessary to enable it to judge whether the railroads are being prudently and wisely managed. Full publicity concerning all matters of policy and management, including the raising and expenditure of new capital, will go far to insure honesty and to prevent discrimination, and no stronger motive for efficiency can be found than natural desire for larger profits which, of course, will obtain, and properly so, with private ownership, but will be entirely lacking under government ownership.

Those who manage the railroads should realize, as I believe they do, that they occupy a dual position—that of semi-public officer and also that of trustee for the owners of the property of which they are in charge, and that in the end they will best fulfill the function of trustee by giving adequate and satisfactory service to the public.

THE COUNTRY'S NEED OF GREATER RAILWAY FACILITIES AND TERMINALS¹

The railroads of the United States are entitled to both confidence and relief because they have not abused their trust in the matter of capitalization. While, to make possible the raising of money, stock-bonuses undoubtedly were given in their earlier history, it is true of them as a whole today that they have by far the smallest capitalization per mile in the world; and that they have kept their capitalization low by using for betterment millions of earnings which anywhere in Europe would have been handed over to stockholders, leaving the cost of improvements to be charged to capital account. This is one of the best-established facts in railroad history, though few people yet realize how great is the difference in our favor.

The statistics of railway capitalization, as given by the Interstate Commerce Commission, are, unfortunately, not always computed according to the same rules. This weakens or destroys their value for a comparison. A change of statisticians may involve a change of method. However conscientious the motive, the result alters relations which should be constant. Thus

¹ By James J. Hill. Address at the annual dinner of the Railway Business Association, December 19, 1912.

the official railway capitalization in 1909 was \$59,259. In 1910 it is returned at \$62,657. But the increase is chargeable mostly to changes in the assignment of capital stock to one account instead of another; and one such change alone operates to increase the average capitalization \$700 per mile for the entire United States. "Manifestly," says the statistician of the commission in his report, "a figure so constructed should not be subjected to the burden of sustaining any very weighty conclusions." The Bureau of Railway News and Statistics estimates the capitalization of 1911 at \$59,345 per mile; probably \$60,000, in round numbers, represents about the average actual capitalization today. This figure is to be compared with the capitalization per mile in other countries, as shown in the following table:

United Kingdom	\$275,040	Germany	\$109,788
England alone	314,000	France	139,237

The increase of capitalization per mile of railroad in England and Wales for the nineteen years between 1890 and 1909 was from \$255,073 to \$328,761, or \$73,688; against a total capitalization for all the roads in the United States in 1909 of \$59,259. It exceeded our total capitalization by \$14,429 per mile. The average annual increase for the nineteen years has been \$3,873 per mile, exceeding the entire annual net earnings per mile of railways in this country during the corresponding period. Our capitalization per mile is from one-half to one-fifth that of European countries; partly because the initial cost of construction was greater there, but largely because of a fixed difference in policy. The American railway makes improvements so far as possible out of earnings or surplus, leaving capital account to carry only new construction. The European road distributes earnings among its stockholders, and issues new capital to provide necessary betterments. The difference accounts for the sharp contrasts of the figures presented above.

The American policy is in the public interest, because it tends to keep fixed charges down. A management can take its own time about replacing a surplus used for improvements. When the money has been procured by issuing new bonds, the interest on these is a mandatory charge and must be added to the total to be raised annually from rates. So far as the public is concerned, the American policy is far better. And it should

be remembered that it became the American policy by choice, not of legal compulsion, at a time when managements had a liberty of action denied to them now. It would be an ironic turn of affairs if this policy, deliberately followed of their own option by railroad managements through the whole history of American railroading, at the expense of the stockholders and because it favors the rate-paying public, should be reversed, and the burden transferred to the people's shoulders as a consequence of regulations prescribed by the people themselves. At present it seems not improbable that this will come true to some extent. A capitalization of \$60,000 per mile will not transact the business of the country. On all trunk lines and wherever population becomes dense and traffic heavy, capitalization will have to be made larger for new facilities and double tracking. The heavy amounts required to provide terminals must also be charged to capital account. With wages and material as high as they are now, billions will be required. If additional money must be borrowed for the less permanent improvement of which I shall speak presently, the country will eventually have to carry a capitalization more nearly approaching that of Europe; and, as a necessary corollary, rates will rise to a corresponding level.

The railways are entitled to confidence and relief because they have displayed efficiency in the conduct of their business. This is just as marked as their relatively low capitalization. The figures already given show an increase of traffic in a year about five times as great as the increase of equipment and eleven times the increase of mileage. Yet the machine has been hauling its load, because efficiency has been developed. Heavier rails, larger engines, cars of greater capacity, increased train movement and the full utilization of equipment have kept business moving. The density of traffic in England, France and Germany should be as much greater than in the United States as the density in the Middle exceeds that in the far Western states. Yet here are the facts:

	Ton Miles Per Mile of Road
France	496,939
United Kingdom	529,622
Germany	827,400
United States (1910).....	1,071,086

It is clear that our railroads have been capably managed, and that the resources and powers entrusted to them are being

used to the highest business advantage. How the money they spend is being employed is shown by the fact that our railroads move 272 ton miles of freight per dollar of net revenue, where the United Kingdom shows only 58, Germany 172 and France 88. For honest and efficient conduct our railways have no equals in the world. By this supreme test they declare their fitness for the gigantic work that still remains to be undertaken.

Not only, as I have shown, have they not charged to capital the cost of improvements covered by stock and bond issues in other countries, but they have shared their gains liberally with the people through rate reductions. It has become common to think of the progressive lowering of rates, while all other charges are rising, as the work of legislative compulsion. On the contrary, many of the most important reductions made in the past were voluntary. These are the lowering of charges on the great staple products of the soil. This has made settlement possible. It has made it possible for the farmer to realize the benefit of high prices for his crops. It has doubled production again and again. It has made possible the movement of lumber from the Pacific Coast to the Middle West and even the Eastern markets. It has become a definite policy. And it has left in the pockets of the people an enormous amount of money that would have gone to the carriers or at least been shared by them if they had fought against cheap transportation for the farm instead of fostering it. If the freight and passenger rates in force on the Great Northern system in 1881 had remained unchanged until 1910, there would have been collected from the public \$1,267,411,954 additional. This amounts to more than eight times the average par value of its outstanding stock and bonds in the hands of the public during the same period. That is to say, if there had been no rate reductions on that system during the past thirty years, it could have paid off its entire capitalization every three and three-quarters years. If railroad rates in the United States had increased as much in proportion as the prices of commodities and the wages of labor between 1894 and 1909, the country's bill for transportation for those fifteen years would have been over seven billion dollars more than it was.

GOVERNMENT RATE-MAKING IS UNNECESSARY AND WOULD BE VERY DANGEROUS¹

The substantive provisions of the Interstate Commerce Act are that (1) rates shall be reasonable and (2) there shall be no unjust discrimination or undue or unreasonable preference between individuals, localities or classes of traffic. No change in these rules is now suggested. Those supporting this agitation should, therefore, show that the present act is inadequate to enforce them. But this is not the case in any respect.

1. *The existing rates are reasonable.* This is shown by the course of freight earnings throughout the country for the past thirty-three years, including 1903, the last year which has yet been officially ascertained. It should be borne in mind that these figures include local as well as interstate business, and that if the two were separated the interstate rates would be considerably less.

Year	Cents	Year	Cents	Year	Cents
1870	1.990	1892 .....	.898	1898 .....	.753
1882	1.240	1893 .....	.879	1899 .....	.724
1887	1.030	1894 .....	.860	1900 .....	.729
1888	1.001	1895 .....	.839	1901 .....	.750
1889 .....	.922	1896 .....	.806	1902 .....	.757
1890 .....	.941	1897 .....	.798	1903 .....	.763
1891 .....	.895				

As to the facts, these remarks of the Commission are pertinent:

Where changes of any importance have taken place in the freight rates of any section, either for local or competitive traffic, in nearly all cases lower rates are now charged than prior to the date of the act to regulate commerce. . . . Only from an extended inquiry would it be possible to accurately estimate the total reduction affected since the passage of the act to regulate commerce, but that it has been very considerable is well known. . . . Comparing the amounts which they would have received on the volume of traffic carried from 1889 to 1893, if the average receipts per mile for 1888 had been maintained during the subsequent five years, it appears that the public would in such case have paid for freight and passenger transportation by railroad from 1889 to 1893, inclusive, \$525,459,587 more than was actually paid for such transportation during that period.²

The foregoing figures show that the downward course of rates has continued since these remarks were made.

¹ By David Willcox. North American Review. 180: 410-29. March, 1905.

² Annual report for 1894, pp. 50, 51.

The slight rise in earnings per mile since 1899, upon which so much comment has been made, was due principally, not to an increase in rates, but to an increase in high-class freight from 23.19 to 24.58 per cent of the total traffic. In any case it was not unreasonable. The average rate in 1897 was .798; in 1899, by reason of unfavorable commercial conditions, but especially of excessively low rates on bituminous coal, the average rate declined to .724; in 1903, it rose to .763—not as high as it had been six years previously, and an increase of thirty-nine thousands of a cent, or about five per cent. This fluctuation clearly came within the expression of the commission that “when reductions have been made on account of commercial depression, it is difficult to see why corresponding advances may not properly be made with the return of business prosperity.” (Annual Report for 1903, p. 48.)

But, aside from this, there has been no such rise in railway rates as has occurred regarding prices of commodities generally. It has already been shown that in 1904, notwithstanding this slight advance in the mileage earnings, the percentage of operating expenses to earnings was 2.57 per cent greater than it was in 1899. The recently published Bulletin of the Department of Labor (No. 51) with reference to the general course of prices shows, too, that, taking 100 as the average for the period from 1890 to 1899, the price of all commodities in 1902 stood at 112.9 or 12.9 per cent *above* the average of the preceding decade. Applying the same treatment to railway rates, they stood in 1902 at 90.2 or 9.8 per cent *below* the average of the preceding decade. This proves that railway rates had greatly declined while prices in general had greatly advanced. The general result of conditions in this country is that the rates are about one-third of the average in England and France and about one-half of the average in Germany.

Very few substantial controversies have ever arisen regarding the reasonableness of rates, and the commission has frequently stated, in substance, that there is no ground therefor. In its annual report for 1893, the commission stated:

To-day extortionate charges are seldom the subject of complaint (p. 12). We are not troubled with the question (under consideration in England) that rates . . . are too high (p. 17). It is significant that . . . there has been, under the operation of the interstate commerce law, a steady decrease of complaints based on charges unreasonable in themselves. The concession is quite general among shippers that, with some exceptions, rates, as a

whole, are low enough, and they often express surprise that the service can be rendered at prices charged (pp. 218, 219). Traffic for very many competing localities is being carried at rates which do not yield a due proportion of the necessary net revenue which carriers must have (p. 221). Rates to competing and distributing centers are not for the most part unreasonably high; they are frequently quite low (Annual Report for 1897, p. 14). Many rates in this country are undoubtedly too low (p. 2). These facts are of general application, because nearly every city in the country of any considerable size is both a commercial and a railroad center; therefore a competitive point in both respects (Annual Report for 1893, p. 39). It is true, as often asserted, that comparatively few of our railway rates are unreasonable in and of themselves—that is without any reference to other charges made by the same carrier or to those of other carriers, but they may operate to create a preference between localities. The cases are *exceedingly rare* in which unreasonableness has been found merely from the amount of the rate itself as laid upon the particular traffic and the distance it was carried (Annual Report for 1898, p. 27).

Accordingly, cases in which rates have been shown to be unreasonable, in themselves are practically unknown. From 1887, until the present time, the commission has found twenty-six cases of rates unreasonable in themselves, or about one and one-half annually. Further than this, not one of these decisions was sustained by the courts, and *there has not been a single case of rates unreasonable in themselves established in the courts since the Interstate Commerce Act was passed*. The record, therefore, proves clearly that the remedies provided by the act have shown no insufficiency.

The claim is, therefore, not that any injustice has been done in respect to reasonableness of rates—there is no one asserting that he has been damaged and the Commission does not assert the existence of any such injustice. It has full authority under the present statute to compel the carriers to cease charging the present rates if they are unreasonable, but it has never taken effective action in the matter; so far as it has gone the Commission has in general sustained recent advances (9 I. C. R. 382). The claim is merely and baldly that rates generally should be fixed by the government (Annual Report 1898, pp. 20, 24; Annual Report for 1900, p. 21).

As no injustice is shown arising from the present method, such expressions of opinion cannot be deemed to warrant the government in wresting from its owners control of the railway property of the country.

2. *The existing remedies are ample to enforce the prohibition of discriminations or preferences between individuals, locali-*

ties or classes of traffic. As already pointed out, the matter of discrimination or preference between individuals has been fully covered by the original act, as supplemented by the Elkins law. The only matter remaining is that of alleged undue discriminations or unjust or unreasonable preferences between localities or kinds of traffic.

In the words of the Supreme Court:

It is not all discriminations or preferences that fall within the inhibition of the statute; only such as are unjust and unreasonable (145 U. S., 284). Commerce, in its largest sense, must be deemed to be one of the most important subjects of legislation, and an intention to promote and facilitate it, and not to hamper or destroy it, is naturally to be attributed to Congress; the very terms of the statute that charges must be reasonable, that discrimination must not be *unjust*, and that preference or advantage to any particular person, firm, or corporation, or locality must not be *undue* or *unreasonable*, necessarily imply that strict uniformity is not to be enforced; but that all circumstances and conditions which reasonable men would regard as affecting the welfare of the carrying companies, and of the producers, shippers and consumers, should be considered by a tribunal appointed to carry into effect and enforce the provisions of the act (162 U. S., 218). The mere circumstance that there is, in a given case, a preference or an advantage, does not of itself show that such preference or advantage is undue or unreasonable within the meaning of the act (162 U. S., 220).

Claims that preferences exist and that they are unjust or unreasonable arise from the natural desire to secure equal advantages with others. "The rate is of very little consequence to the merchant, provided it is the same to his competitors as to himself" (Annual Report for 1897, p. 18.) The efforts of traffic officials to meet the views of shippers and consumers in these regards have had more to do than any other cause with the reduction of rates and their proper adjustment as between different localities.

In view of their opportunities, and the temptations to which their traffic officers are exposed, it is perhaps not too much to say that the obligations of neutrality in this regard are usually observed, and that discriminations of this character are not often the subject of complaint (Annual Report for 1895, p. 17). It is worth observing that some, at least, of the most important controversies involving the rates and methods of railway carriers, are rather between competing communities or producing regions than between rival lines of railway. Railway development has extended far beyond the point at which any of the greater systems finds its interests so identified with a single community as to feel wholly indifferent to the demands and needs of all competing communities. Indeed, there may be entire sincerity in the contention, on the part of the officers of a

great system, that any adjustment which satisfies the rival communities which it serves cannot be seriously objectionable from its own point of view. In such degree as this contention may be sincerely advanced, the carrier becomes a relatively unimportant factor in the struggles of rival localities" (Annual Report for 1904, pp. 28, 29).

This demand for absolute equality among localities can never be entirely satisfied. If under any conceivable form of statute the Commission could accomplish this, it would still be very questionable whether that result would be altogether desirable, as it would tend to destroy the active spirit of enterprise which is necessary to commercial progress.

It is idle to look forward to an adjustment of rates which, as applied to localities and differently circumstanced persons, will bear no heavier upon one than upon another. Such mathematical quality is manifestly unattainable through human endeavor. Not even common control of all railways through consolidated ownership or government purchase could accomplish such a task of equalization for thousands of places and millions of people. Certainly, the much-vaunted theory of uniform charges for all traffic would, under the greatly diversified conditions which now prevail throughout the country, have the opposite effect, and inflict greater discriminations than arise under the existing general practice of fixing charges which attract traffic to the various lines. *Uniform rate per mile on all traffic for any distance would arbitrarily limit commerce to sections and greatly restrict production* (Annual Report for 1893, p. 218). Trade is no longer limited to circumscribed areas; distance hardly ever bars the making of commercial bargains between widely separated parties, and almost every article of commerce finds the competing product of another region in any place of sale. The consequence is that the products of the farm, the forest, the mill and the mine are continually demanding from carriers rates adjusted to values in particular markets. It is this competition of product with like product, of market with market, that has induced carriers, in their eagerness to increase the volume of their traffic, to continually reduce their rates to market points. Such competition is the competition of commerce itself; the strife between competing industries which the public interest demands should be left free from fettering laws and uncontrolled by restraining combinations. (*Id.*, p. 219).

In states where railroad commissions have power over future rates, questions of alleged discriminations between localities and classes of traffic are as frequent and acute as ever. Like all commercial questions, these matters are best settled between the parties. The foregoing expressions show that the carriers, in general, use their best efforts in the premises. And the record proves that the present remedies have not been insufficient. It will shortly be shown in detail that since the Interstate Commerce Act was passed, contested cases of all sorts have been comparatively few in number, and that, *with two exceptions, the*

Commission has been reversed in all of its decisions as to discriminations or preferences of any sort which have been passed upon by the courts.

The facts, therefore, show no necessity for seizure by the government of control over railroad property in order to prevent undue discrimination or unjust or unreasonable preference.

Moreover, governmental rate-making would establish rigid methods of transacting business which would tend to arrest commercial progress. The most effective cause of reduction of rates is the effort of traffic officials to enable their respective shippers to extend their business and constantly reach further markets and consumers.

The location of new business enterprises is frequently settled since the passage of the act to regulate commerce, as well as before, not so much by the wishes of those who control them and the advantages for economical production or trade afforded at particular places, as by the favorable transportation rates which railway managers can be induced to put in force (Annual Report for 1894, p. 57).

This process of development can be continued only through gradual reductions of rates, and in its continuance shipper, carrier and consumer are alike interested. But this process of development will be arrested if the rates are finally subjected to the veto of a body having no substantial interest in the success of the transportation business or of the industries upon the several lines.

Every rate once fixed would be incapable of change without a proceeding before the Commission as dilatory as a lawsuit; and, as the Commission proceeded, the scope of this rigid condition of rates would constantly extend. Every practical man must realize that business is carried on successfully by negotiation and agreement of the parties, rather than by the judgment of any tribunal. "Business by lawsuit" would be a lamentable failure. There is no successful branch of business in which the general future relations of those engaged therein are regulated by third parties, whether an administrative commission or a court of justice.

If, indeed, a condition of absolute equality among different localities could be established at a particular moment of time, it would be temporary only. Industry in this country is intensely progressive, and the perfect equality of one day would probably be the grossest inequality of another. The absence of

elasticity in a system of government rate-making is one of its most serious faults; thus the rate-making state commissions have had to fall back on distance tariffs, on account of their inability to make those delicate adjustments which are constantly made by railway traffic officers. Such rigidity is a bar to industrial progress, and probably accounts, in large measure, for the fact that in the states which have rate-making commissions, the rates are higher under similar circumstances and conditions, than in other states which have left the contract of transportation to unrestricted negotiation between the parties.

The remedy lies in the vigorous enforcement of existing statutes, which prohibit rebates and discriminations; and resort by the Commission directly to the courts without dilatory preliminaries, so as to secure expeditious action by the only branch of the government which is qualified to administer justice and determine the rights of property. This will prevent unjust discriminations and undue or unreasonable preferences. So far as concerns reasonableness of the rates, it is obvious that the present method under which the Commission has power to pass upon existing rates has been effectual. But governmental future rate-making would play havoc generally, and "business by lawsuit" would be intolerable.

IMPORTANT RAILROAD QUESTIONS TO BE CONSIDERED¹

A definite statement of proposals for railroad legislation, in accordance with the principles adopted by The Merchants Association, and printed in "Greater New York," was approved by the Executive Committee of The Merchants' Association at its meeting last Wednesday. At the same time preambles and resolutions in opposition to government ownership of public utilities were approved.

The proposals which are to be presented before the Newlands Committee next Monday, are formulated as follows:

"Whereas, It is vital to the welfare of the whole country that the entire system of railroads of the nation be maintained upon

¹ Statement of proposals to Newlands Investigating Committee by the Merchants' Association of New York. Greater New York. 5: 1-4. November 20, 1916.

a level of the highest efficiency, to which end regulation by public authority is necessary; and

"Whereas, The railroads of the country are now subject to regulation by the federal government and each of the forty-eight states, which multiple control by independent authorities results in a large body of unrelated, unco-ordinated and often conflicting legislation; in the enactment by some states of regulatory laws which interfere with the rights or laws of other states; in requirements as to equipment, methods and conditions of operation, differing in the several states, with which compliance is difficult and sometimes impossible; in the fixing by different states of different rates of charge for a similar or identical service; in great increase in the cost of operation, and in making difficult the conduct of a railroad operating in two or more states, and

"Whereas, Nineteen states now prescribe the conditions under which securities may be issued by railroads operating within their borders, nearly every railroad thereby being subject, in the matter of issuance of securities, to the requirements of two or more states, each having power to refuse its assent and thereby to prevent the issuance of such securities, and to require the expenditure of the proceeds of such securities within the borders of a particular state, irrespective of the place where the expenditure is properly required; and

"Whereas, The effect of this multiple regulation has greatly and wastefully increased the outlays of the railroads without increasing their earning power, and curtailed their revenues by direct reduction of rates; and

"Whereas, By reason of these causes, among others, the credit of the railroads has been gravely impaired within recent years through the insufficiency of earnings and the unwillingness of investors to permit their capital to be subject to hostile attacks by numerous legislative bodies, so that there exists a condition under which new issues of railroad stocks offer little attraction to permanent investors, the sole source of additional financial support available to railroads being the issuance of bonds secured by mortgages upon the property, which resource is rapidly becoming unavailable by reason of the existence of prior liens; now, therefore, be it

"Resolved, By The Merchants' Association of New York that the welfare of the nation requires that the railroads of the

country be maintained on the highest practicable plane of efficiency; that multiple control by diverse state authorities as well as by federal authority, has become undesirable and harmful; that while the public interest requires that all the railroads of the country shall be effectively regulated in the public interest, such regulation can best be affected by the sole authority of the federal government, thereby insuring consistency and uniformity of regulation, and consideration of the economic necessity of so protecting the revenues of the railroads as to enable them to attain the efficiency demanded in the public service;

"Resolved, That if Congress already possesses the necessary constitutional power to effect such sole regulation by federal authority, it is urged that Congress fully assert and exercise that power forthwith; or, if the present powers of Congress are insufficient for that purpose, that the necessary powers should be provided by amendment of the Constitution;

"Resolved, That such regulation should include sole control by the federal government of the conditions under which railroad securities may be issued, and that as a means to that end, federal incorporation of railroads be provided for;

"Resolved, That the Interstate Commerce Commission should be so enlarged and its procedure so arranged as to enable it effectively and promptly to dispatch the business imposed upon it."

Against Public Ownership

The preambles and resolutions relating to public ownership are as follows:

"Whereas, The Newlands Commission, created by Senate Joint Resolution No. 60, is about to investigate, among other things, 'the comparative worth and efficiency of governmental regulation and control (of public utilities) as compared with governmental ownership and operation' and

"Whereas, The fundamental principles of our form of government require: That the members of legislative bodies and all principal executive officials be periodically subject to change; that the number of members of legislative bodies be large and that representation be sectional; that the legislative bodies by means of laws passed by them, shall direct and control in minute detail the acts of executive officials; that the discretionary power of such officials be restricted to the narrowest possible limits;

that no outlays of public monies be made except as expressly authorized by law; and

"Whereas, By reason of these conditions, inseparable from our form of government, governmental operation of economic undertakings, whether federal, state or municipal, is characterized by extreme delay and inertia, vacillation, hesitancy and inconsistency in matters of policy; wasteful outlays in response to sectional demands; insufficient provision of funds, when needed, for necessary purposes; absence of close and harmonious co-operation between the legislative directorate and the executive officials; insecurity of tenure in the higher places and lack of self-interest as an incentive; frequent change of higher officials and the injection into office of new and untried men; unsuitable methods of selecting executive officials whereby such officials are often not properly qualified by expert knowledge, previous training, experience or proved capacity; hampering conditions imposed by law upon executives whereby they are deprived of necessary control of operation and of their subordinates; and

"Whereas, From these conditions naturally result imperfect co-ordination, lack of qualified management, bad operating methods, and general waste and inefficiency; both the methods and the results being diametrically opposite to those which prevail in properly managed business undertakings, which latter are governed solely by economic considerations and require for their success close and friendly relations between the directorate and the officials; the prompt provision of funds as required by the economic needs of the business; high capacity, long experience, and special training on the part of the executive officials; assured tenure during efficiency, self-interest, and the possession by such officials of a very large degree of discretion as to outlays and operating details; now, therefore, be it

"Resolved, By The Merchants' Association of New York that governmental methods in the conduct of business affairs are inherently defective by reason of the fundamental restrictions imposed by our form of government; and that governmental methods are often inefficient and wasteful and therefore unsuited to the conduct of business undertakings; and be it further

"Resolved, That The Merchants' Association of New York is opposed to government ownership and operation of railroads, telephones, telegraphs, and other public utilities, believing that such utilities are far more effectively operated under private

ownership, subject to public regulation, than would be possible under governmental ownership and operation; and that it would be a national calamity to subject these instruments, indispensable to the welfare of the whole country, to the hampering, inefficient and wasteful methods inseparable from governmental undertakings."

OBJECTIONS TO GOVERNMENT OWNERSHIP OF RAILROADS¹

Returning to my first objection to government ownership of railroads, I assert that it would be absolutely destructive of popular and representative government. The ownership of railroads would be quickly followed by ownership of telegraph and telephone lines, express companies, water transportation companies and electric railways doing an interstate business. I am opposed to government ownership of any of these public service corporations.

I present herewith a table I have prepared giving the number of employees, for the years specified of the United States government and of the different public service corporations, showing a total of 3,054,988 employees.

1914—Number of Government civil employees.....	469,000
1912—Telephone and telegraph employees.....	220,656
1913—Railway employees	1,815,239
1912—Electric and street railway employees.....	282,461
1906—Water transportation	188,348
1907—Express employees	79,284
Total	3,054,988

Reflect over these figures. Remember that in the last ten presidential elections the President has been chosen by a plurality varying from a little over 7,000 to about two and a half millions. Can any person familiar with the politics of this country doubt the correctness of the assertion that, under government ownership of these public service corporations, with the resultant addition of over two and a half million employees to the government pay roll, those employees and their friends would in-

¹ From an address by Hon. Jonathan Bourne, Jr., former United States Senator, before the National Civic Federation, November 4, 1914. In Railway Library and Statistics, 1914.

evitably control the government under our political machinery. The tendency would be more pay and less service in governmental employment, resulting in ceaseless efforts on the part of outside labor to secure government employment because less onerous and more remunerative, with cumulative dissatisfaction and irritation in all private enterprise.

In the past, presidents have been able to dictate the nomination of their would-be successors, either themselves or others, because of subservience to the executive of the great number of federal office holders. While it is true that universal adoption of presidential primaries would minimize the possibility of repetition of this misuse of power in the future, yet, even under a primary system, the existence of over three million employees, subject to removal, promotion, transfer or demotion by executive order, would give a political power that should not be delegated to any single individual if the government is to last.

Would Throw Railroads Into Politics

Advocates of government ownership urge that the taking over of the railroads by government would eliminate them from politics. In my opinion it would have the opposite effect, throwing them into politics.

The assertion that the railroads are now a positive factor in politics is untrue. Undoubtedly there was a time when railroads and other large corporations exerted a very large and very effective influence upon state and national politics, but that time has passed. The direct primary has overthrown the power of the corporations had under the old convention system, and the people have the power today not only to select between candidates, but to choose the candidates as well.

Government ownership would be followed by organization of government employees for the promotion of their own interests. These employees would immediately become an organized factor in every campaign. The influence would be exerted, not primarily for the promotion of the best interests of the country, but for the promotion of their own interests. Their influence would be thrown with the party or candidate that promised most for the fulfillment of their desires.

So long as the party in power kept on good terms with the three million government employees, it would have their support, and the support and co-operation of their relatives. While

it would be absurd to argue that any such body of men would act as a unit at all elections, it is altogether probable that a sufficient number of them would so act as to make them a formidable political organization.

An administration backed by an active organization spread throughout the length and breadth of the country would thereby have a tremendous and practically overwhelming advantage over the party seeking to supplant it.

The establishment of classified civil service rules and regulations would not remove the menace to truly representative government. Even though appointments be made in part in accordance with competitive tests, the fact that chief officers of the party in power have control over promotions, demotions, transfers and removals, would make the individual governmental employee subservient in politics, except where practically the whole body of employees acted in accordance with prearranged plans for the benefit of the employees themselves.

Regulation Necessary Under Government Ownership

Proceeding now to a consideration of my second objection:

It is strange that the advocates of government ownership, who assert the failure of government regulation, overlook the fact that government regulation is just as essential under government ownership as it is today. If the Interstate Commerce Commission must be charged with the duty of regulating rates supervising provisions for protection of life, and guarding against favoritism and discrimination, surely all these duties must be performed under government ownership.

The conflicting interests of competing shipping points would exist under government ownership just as they exist today.

Every section of the country and every industry would be before the managing board of the government railway system asking for reduced rates on certain commodities, or between certain points.

Every community would be before the board asking for improved service, improved equipment and extension of lines.

Where the Interstate Commerce Commission has one problem to solve now, it would have ten under government ownership.

It cannot be expected that discrimination will be eliminated under government ownership. Those who anticipate any such

form need only recall the serious differences that have arisen already in the Federal Reserve Board over the effort of the Secretary of the Treasury to extend special favors in financial matters to one section of the United States.

Discrimination in Government Service

Another proof that we would have discrimination—unfair discrimination—under government ownership, may be found in the records of the Post Office Department, where such discrimination has been practiced. In 1910 Postmaster General Hitchcock ordered the establishment of what is known as the "Blue Tag" service, under which certain publications were ordered transported on freight trains, while rival publications of very similar character and competing for the same trade, were continued in the mails.

Please remember that although these magazines which were ordered transported on freight trains paid exactly the same rate of postage and were admitted to the mails under exactly the same laws as those were continued on fast mail trains, yet they received, under the Postmaster General's deliberate order, a far less efficient character of service.

When such a discrimination can be made in the postal service, who can doubt that there would be similar discrimination under government ownership and operation of railroads.

If government regulation is a failure today, we have no good reason to believe it would be a success under government ownership. We cannot hope to secure for the management of a government owned railroad system men who are more honest or more capable or more aggressive in the performance of their duty than are the members of the Interstate Commerce Commission and the officers of the Department of Justice.

If they cannot succeed in enforcing the law and in preventing discrimination, we cannot expect them to establish and maintain equitable service under government ownership.

If a member of the President's Cabinet will undertake to favor one section of the United States in the operation of a currency and banking law, some other member of the President's Cabinet would attempt to favor some section of the country in the management of government railroads under his control.

Therefore, I assert again that if government regulation is a

failure, government ownership will be a failure, and if government regulation is a success, the reason for government ownership is eliminated.

Government Service More Expensive

The economic objection to government ownership is the one I deem of least, and, in fact, of very slight relative importance. I am not one of those who think that government ownership would lead to financial disaster, or ruin of the transportation service, or the destruction of internal commerce. I have no doubt whatever that the government could acquire the railroads, operate them with a fair degree of success, inaugurate some reform and save some waste though the elimination of duplication. But I am also convinced that while the government, as the owner and operator of the railroads, would likely inaugurate improvements in some respects, these would be more than offset by deterioration in the service in other ways, and that the economies accomplished by elimination of duplication would be more than counterbalanced by increased expenses in other respects.

It seems to me to be absurd to argue, as some gentlemen do, that the government could take over the railroads, provide better equipment, install the most up-to-date and expensive appliances for the protection of employees and passengers, increase the wages and reduce the hours of employees, and at the same time give service as good as now rendered at a less cost.

That every practicable precaution should be taken for the protection of life, no one will question. This, as I understand it, the Interstate Commerce Commission, now has the power to require. I have no doubt whatever that it has ordered the installation of protective equipment as rapidly as it is deemed practicable.

Undoubtedly there is some waste in the present system of management because competing roads maintain more frequent train service than is necessary between certain points, through an effort on the part of each to secure as large a share as possible on the traffic. The elimination of some of the trains would mean a somewhat reduced service, a correspondingly reduced cost and a consequent saving. I can not agree, however, with those who believe that this reduction in service, due to the elimination of competition, and reduction of supervisory organization in the management due to the consolidation of all the railway systems

into one, would effect any economy whatever, when allowance is made for the increased number of employees incident to government ownership. That it costs the government more to perform service than it does a private concern is so generally recognized that it requires no demonstration.

Under present conditions, passenger and freight rates are practically uniform on competing lines and the only competition is in the matter of service. The effort of the managers is to secure a larger portion of the traffic by providing superior facilities and rendering superior service. With the elimination of competition under government ownership, this incentive would be entirely removed. At the present time, every employee is urged by his superiors and compelled by his own desire to retain his position and secure promotion by demonstrated ability, to put forth every effort to secure business for his company by offering the traveler and the shipper the best service practicable. Under government ownership that incentive would be removed. The employee would perform his routine service with faithfulness, no doubt, but without putting forth unusual effort.

One of the arguments made in behalf of government ownership is that it would mean increased compensation to railroad employees. That this result would be realized, no one will question, nor shall I assert that it ought not be realized. What I do contend is that the advocates of government ownership who base their arguments upon economic reasons, err in their contention that the government can both increase compensation of employees and reduce the cost of transportation to the shipper.

The average compensation of the present railway employee is about \$723 per annum. The lowest salary paid to the railway mail clerk, during the first year of his employment, when he is performing practically unskilled service, is \$900 per year. The average compensation of the railway employee is therefore below the least compensation of railway mail clerks in the employ of the government.

If the average compensation of railway employees should be increased one-third, which is a very conservative estimate of the increase that would be experienced under government ownership, the total addition to the compensation account would be \$400,000,000 annually—the present pay roll of the railroads amounting to over \$1,200,000,000 in round numbers.

ARGUMENT AGAINST GOVERNMENT RAILROADS IN THE UNITED STATES¹

The people of the United States are enjoying unprecedented prosperity. The causes of the present rapid development of the country are numerous, but probably the highly developed railway transportation system has been more influential than any other force. In 1870 the railroad mileage of the United States was only 53,000; today it is 220,000, an increase of over 300 per cent in a generation. Although no one questions the financial success of private management of railroads, there are many persons who believe that the railroads in the United States should, in the future, be owned and operated by the government. Those who are of this opinion argue that the railroads as now managed are a private monopoly, the effects of which are detrimental to the public, and that the only method of escaping the results of private monopoly is to substitute therefor the greatest government monopoly the world has ever known.

Such a program is so revolutionary that it can be justified only by an absolute demonstration of the failure of the present method of private ownership and management of railroads to meet equitably and adequately the transportation needs of the people of the United States. Furthermore, the advocates of the change must be able to prove that government operation can be made a success.

If a radical change is to be made in present railway operation, it must certainly be made only for good reasons. Are there adequate reasons? If so, one of the reasons would naturally be high rates. As far as rates are concerned, the consensus of intelligent opinion is that rates are generally lower in the United States than in any other country, and that until very recently, at least, they have tended steadily to decline. The complaint in regard to rates is not that they are too high in general, but that they are unduly high in certain localities and that they are not uniform to all shippers, i. e., that they are to some extent extortionate and to a large extent discriminatory.

How far, it may be asked, will government ownership

¹ By William G. Robertson. *Annals of the American Academy*. 29: 342-51. March, 1907.

simplify the problem of rate-making? It may, of course, be assumed that the government will be as much concerned as would any private corporation in establishing freight rates that will be reasonable and attractive to shippers generally, and at the same time remunerative and yield fair profits upon the capital invested. To one who has never considered the subject, the intricacies of rate-making will prove a painful and vexatious surprise. There are so many different and discordant elements entering into the conditions that an exact solution is impossible. It is not our purpose to explain in detail what the rules of rate-making are or should be, but rather to emphasize the inherent and accumulated difficulties involved. As observed by the Industrial Commission, in its report to Congress, "the conditions are highly complex, and no simple and general rules can be made to govern in all instances. The very complexity of the problem emphasizes the necessity for intelligent direction."

The problem which a freight agent or traffic manager has to meet is so different from that which the public supposes, that it is hard to explain it in a few words. The picture that seems vividly portrayed upon the minds of most men is that of the general freight agent arbitrarily deciding upon whatever rate he deems sufficient to pay for the "cost of service" (the cost of actually moving a ton of freight a certain distance), together with enough to cover the company's taxes and the interest on the bonded indebtedness (which is generally assumed to be needlessly and culpably large), and to pay dividends on an artificial and imaginary capitalization. In reality, this sort of reasoning is putting the cart before the horse. The rate is really dependent upon conditions in the world of trade, the character of the commodity to be moved, the extent of competition from other carriers, either rail or water, and the possibilities of the development of a line of business or a section of country.

When the rate has once been made and the revenue earned, the next problem is the prosaic one—very familiar to every housekeeper—of adjusting expenses to income. The name of these expenses is legion: The wages of labor and the cost of fuel and innumerable supplies are elements in the cost of conducting transportation. The maintenance of the roadbed and stations, and of the terminal facilities in great cities—these are elements in the maintenance of the physical property of the

road. New engines and cars and the repair of old ones make up the account called maintenance of equipment. The taxes due the state, and the interest on the bonded debt of the company, make up the company's fixed charges; charges which must be met if the corporation is to remain solvent. Then there is still the need of setting aside funds against the depreciation of the property, the maintenance of a surplus against hard times and unlooked for expenses and emergencies; and, lastly, the raising of a net revenue for dividends, so that those who own the road may receive some return on their investment. All these varied expenses enter into the financial side of railroad management.

Very often the salvation of a road is bound up with a reduction of its cost of operations rather than in the raising of its freight rates—which latter performance is likely enough to be a sheer impossibility, and unwise, even if possible. The Lehigh Valley and the Southern Pacific roads are recent illustrations of this fact. Both of these companies found it necessary some years ago practically to reconstruct their properties, if they were to remain in the business of transportation and earn money. After periods of entire cessation of dividend paying, and by means of prodigal expenditures on improvements, they have once more taken their places in the list of properties for investment. Very often these periods of reconstruction press with crushing force on the owners of the road, the stockholders, of whom we hear so little in most of the discussions on railroad reform. Sometimes nothing else than a heavy loan will give the company the ready cash to meet importunate but just demands of shippers for increased facilities and speedier transit of freight. Sometimes there must be the heroic remedy of a receivership, a scaling down of indebtedness, and a general reorganization.

It is idle to imagine that officials or clerks in a government bureau will be able to handle such questions as we have mentioned better than the trained, experienced and well-paid officers of a railroad. Nay, it is difficult to think of their being intelligently, speedily and satisfactorily disposed of at all by any government department. Whoever has had dealings with a great government office knows the truth of these words. For reasons that are pretty well understood by the American people, the government possesses an unrivaled facility for drawing to itself a vast proportion of the mediocre, the lazy and

the unambitious. While every government office contains a certain modicum of faithful and efficient public servants, it is usually the irony of fate that they are in a permanent minority, are persistently underpaid, and, if they have not lost heart, are seeking an early opportunity to retire from public service altogether. In short, there is a steady tendency for the competent to resign and the incompetent to remain, coupled with an appalling official inertia that tends to stifle the slightest exhibition of individual enterprise or initiative. This fatal tendency toward petrified conservatism is one of the worst features about the conduct of public business. Nor is there much hope of any marked improvement through civil service reform. Excellent as that is, it is at best a cumbersome piece of machinery, ineffective outside of certain limits. A vast improvement on the spoils systems, it has completely failed to raise the average government office to anything like the level of effectiveness easily secured in any good private business establishment. Enthusiastic reformers cheat themselves into the belief that the weight of an enlightened public sentiment—the traveling and shipping public being brought in daily contact with the railroad—would compel an improvement in the conditions we have pictured. Has the weight of public sentiment ever permanently cured the lesser diseases of the body politic? Has it brought effectiveness, economy and high character into the police, street and water departments of our great cities? How often is a state capitol built within the appropriation? Have the taxpayers of New York ever checked extravagance and corruption on the Erie Canal, or taken that formerly useful artery of travel out of “politics”?

Even assuming that the tone of the public service can be made equal to that of an ordinary business house, the question still remains why government officials will be able to solve transportation problems better than private individuals. There is no magic in wearing the livery of government, and no private fund of knowledge is at the disposal of its officials. They have no peculiar facilities for reaching correct conclusions. The problems will not be a whit simplified by placing the carriers in the hands of a government bureau. The difficulties that now hang about the subject of freight rates are inherent and rest in the very nature of the service to be performed. Unless freight rates are to be prescribed on a blind, arbitrary

and unreasonable basis, without regard to the real and ever-changing conditions of the business world, the same difficulties that now puzzle traffic managers, vex merchants, and assail railroad commissions and courts, will be present as surely and as potently under public service as under private ownership.

But to the mercantile community the transfer of ownership would be a change fraught with unending and incalculable mischief. If there is one desideratum for the shipping community and the world of trade, it is a system of freight rates that shall be flexible and adaptable to the thousand and one varying conditions of business. We have lately heard so much about "stability of rates" and "maintenance of the published tariffs"—necessary and proper as these are—that we have almost forgotten that flexibility is as essential as uniformity. It is the glory as well as the weakness of our transportation system that it is peculiarly American, truly a plant of native growth, and that it has, on the whole, adapted itself marvelously well to the development and unprecedented expansion of our country. This has resulted from a remarkable power of adjustment to local needs in a land where growth and change have been abnormally rapid. New communities have received transportation facilities at times when there has not been enough business to pay the bare cost of the salaries of engineers and conductors. Industrial plants, not only those of overgrown corporations, but new ones in sparsely settled regions, have enjoyed freight rates which have enabled them to land their goods in the first markets of the world. Witness the action of the Great Northern road, ever since its inception, towards the farmers and lumbermen of the northwest. Note the policy of the Southern Railway towards the iron works of Alabama and the cotton mills of the Carolinas and Georgia.

If in place of a management of this kind, at once both sympathetic and self-interested, the merchants had been obliged to meet the stolidity of a government bureau, its circuitry of operation, the desire to postpone action till "after election," how different must have been their experience. Or, if they had been forced to deal with Congress, they might have seen the measure succeed in one house or before one committee, only to be indefinitely delayed in the other house or in the committee of the whole, or played off against other interests in far-away sections of the country whose representatives demanded some *quid pro*

quo for their support. They would then have realized the profound truth contained in the observation of a great modern historian, that the people's representatives and lawmakers have rarely accorded any great public privileges except under strong pressure.

Under present conditions, the aggrieved merchant may always appeal from the railroad company itself to government aid in some form. State and federal commissions stand ready to adjust rates—sometimes, indeed, with “a strong hand and a multitude of people”—and behind the commissioners are the courts. Everybody is ready and willing to move against a railroad corporation. But let the government once become the supreme monopolistic owner of the mightiest railroad in the world, and how feeble and helpless will be the shipper who pleads before some government department for relief in freight rates, having nothing but the merits of his case to invoke in his behalf.

Thus far I have been insistent only upon the main contention that, in the very nature of the case, there is nothing about government control or government officials that can promise any easy or satisfactory solution of the problems of transportation, and much to suggest the very reverse. But there are many other weighty considerations against government ownership and in favor of government supervision. One of these is the facility for offering secret rebates which must occur under any plan of government-managed railroads. From the earliest times, government officers have been peculiarly open to fraud and malfeasance, and especially so in large and highly centralized governments. Witness Russia and China across the water. Glance at our own history. During the years after the civil war the government at Washington seemed fairly honeycombed with corruption. The Credit Mobilier and the whisky frauds flourished, and Congress actually found it necessary to impeach a cabinet officer for misconduct. The scandals in our municipal governments are too well known to need specific mention; and in very recent years we have seen the discovery of gross frauds in our postoffices, and a shameful waste of millions of dollars voted by the people of New York for improving the Erie Canal. There is nothing about government management that gives the smallest hope that the secret rebate would not be freely used. Indeed, the ease with which

favours of this kind could be granted or denied would place in the hands of the dominant party such a power as is fearful to contemplate. And what reformation is so difficult of accomplishment as the cleansing of a great bureau or department?

There is another excellence which we Americans have thus far enjoyed with which we must part forever if the government is to run our railroads. This is the possibility of reorganizing a bankrupt and unprofitable line by scaling down its debts and charges. This process, drastic and severe as it may be upon a few individuals, has, nevertheless, proved of inestimable benefit to the country at large, and the very salvation of many of our now flourishing companies. It has enabled all parties to wipe off old scores, turn over a new leaf and start afresh; and this reduction of charges has made possible important improvements. But in Germany, where government ownership has long prevailed, much embarrassment has been felt from the inability of government to carry out such a process of reconstruction. The debts of the road once assumed by government remained as a permanent incumbrance, and have never been discharged if the earnings have been insufficient to pay the interest. This is but another illustration of the necessary rigidity and want of elasticity of any system of management proceeding by constitution and statute, it is bound to observe legal rather than commercial requirements, and is dependent on the action of hundreds of lawmakers gathered from the four corners of the land.

If the government is to run the railroads, the thinking part of the community will demand that they be run at a profit, and not at a loss, and that the freight shall be lower than—not merely as low as—at present. If this mighty change is to be made, some great, striking and substantial gain must be the result, or the plan is not worth the carrying out.

While the American people have great faith in representative government within lines that have been tried, nevertheless they have seen the legislative branches of their government, state and federal, severely strained of late to transact only such necessary and usual business as has fallen to their lot. In the space of seventeen years, they have lived through the enactment of three tariff acts imposing duties on imports. The passage of these measures has afforded them an opportunity of observing how Congress deals with a complicated measure affecting many rival sections of the country and hundreds of hostile interests.

The framing of a tariff bill, vast and vexatious as it is, is child's play beside the task of arranging a schedule of freight charges for the multitudinous cities and towns of a country extending over 3,600,000 square miles, and having commercial relations with every nation on the face of the globe. In the presence of such a duty, the most learned legislature that ever convened might well shudder in abject helplessness. From time to time, as certain individual states of our union have created state railroad commissions, they have often provided that the first duty of the new commission should be the preparation of a complete schedule of freight rates for all purely intra-state commerce (i. e., commerce originating and terminating within the limits of the state). Insignificant as this labor is by the side of the making of a schedule of rates for the nation, it is nevertheless a herculean task, and one that has proved beyond the powers of any set of commissions that was ever got together to perform intelligently.

But the limits of this article forbid a consideration of the subject in all its details. I have tried to indicate some of the enormous difficulties involved in any system of government control and ownership of the machinery of transportation. But I have only touched upon them, and some I have not even mentioned, as, for example, the immense national debt that must be created in the attempt to purchase billions of dollars worth of railroad property, the vast issue of bonds thereby made necessary, the bitter opposition to even moderate bond issues that has been manifested by a great portion of our people, the jealousy of organized labor toward so vast and irresponsible an employer as the government, the entrance of the railroad workingman's vote into politics as the vote of a distinct faction of officeholders, the vice of a quadrennial change of management and administration at the national capital, and last, but by no means least, the probable change in the temper and tone of the federal government toward both the states and the people when made the repository of such great authority and power.

The true line of progress is that which has grown up naturally in the past generation, since 1870, and along which we have thus far traveled safely, if not brilliantly. It is the policy to which President Roosevelt has pledged himself, which Congress has embodied in a statute, and which more than thirty states of our union have actually tried by means of railroad commissions. It is a policy of regulation and supervision to be

sharply distinguished from that of ownership, just as we have long had a government supervision, both state and federal, over banks, without participation on the part of the government in the actual business of banking. It has not, of course, secured perfect results, nor given universal satisfaction. Very few institutions in this world have, not even trial by jury, which is probably enshrined as strongly as any purely political institution can be in the hearts of the Anglo-Saxon race. In our new rate law, we have gone to the very verge of safety in the experiment of government regulation; and common prudence demands that we give the new machinery a chance to show the kind of work it can do before we attempt further alterations.

SHALL THE GOVERNMENT OWN THE RAILROADS?¹

The actual situation of the railroads, at the moment, seems to me so serious that, if this application for an increase of freight rates is declined, I fear the demand for the public ownership and operation of the steam railroads of the country will be inevitably strengthened. In a spirit of despair, men who know better will be apt to say, "That is the only way"; and out of despair, I need not remind you, wise counsels seldom come. I make no apology, therefore, for pointing out briefly, on this occasion, some of the difficulties attaching to government ownership and operation of railroads in a country like ours, with a federal government evolved as ours has been, covering half a continent. Such information as I can command leads me to believe that in Germany, France, Australia, Italy and Austria, the earnings of the state-owned railroads in each country barely equal, if they do equal, the sums paid in taxation by the railroads of the United States. The freight rates prevailing in those countries are uniformly higher, I believe, than the freight rates prevailing in the United States. In some cases they are more than double, but it is noticeable that the average passenger rate, disregarding the division by classes obtaining there, is lower in some, and, I think, in all, of those countries than here. This is largely due, no doubt, to the fact that multitudes there travel

¹ By Seth Low. Opening address at the annual meeting of the National Civic Federation. Published in *Railway Library and Statistics*, 1914. p. 177-81.

third class, and are given accommodations that would not be acceptable here.

It is needless for my purpose to pursue this comparison into detail. What I wish to point out, is, that in our country, by reason of its vast extent and by reason of its federal government, and its historic evolution, the problem of public ownership, and not less, the problem of public operation, are surcharged with difficulties that do not exist under different conditions. Leaving out of account altogether the difficulty of securing wise and economic management under the democratic conditions prevailing in the United States, the first point to emphasize is the difficulty of acquiring effective control of the railroads even if desired. Most of the railroads, if not all of them, are incorporated by the different states. This means that every railroad is given the authority by each state to operate within its own borders, and that every such road is equipped with the right of eminent domain to condemn land for railroad purposes within such state. What authority is to compel the states, or rather, what appeal is to induce the people of the various states to permit the railroads to surrender state charters in favor of national ownership; and in addition to grant to the national government authority to equip railroads so chartered with the power of eminent domain in every state of the Union? Without such power of eminent domain it would be impracticable for railroads to be enlarged or for new roads to be constructed. If, on the other hand, each state were to absorb its own railroads, we should have a condition in this country out of which it would be impossible to bring effective unity of action and a railroad service operated for the general good. Imagine, for example, the New York Central Line from New York to Buffalo owned and operated by the State of New York and the Lake Shore & Michigan Southern owned and operated in fragments by the states of Pennsylvania, Ohio, Indiana and Illinois. Who can think for a single moment that the result in public service would be either adequate, economical or satisfactory? Moreover, if the national government, despite every difficulty, were to succeed in absorbing the railroads of the entire Union, every state would lose the control of its intrastate traffic that it now enjoys; and every state would lose all the income which it now collects from the railroads by taxation, because United States property is not subject to taxation in any state. Every state, therefore, in such a case, would

be confronted with both an economic and a social problem, born of our federal system, and the scale upon which these effects would be felt would greatly magnify the embarrassments.

But, assuming for a moment that this great economic and social change has been sanctioned and actually put into force, try to imagine, if you can, how the conflicting interests of different parts of the United States could be harmonized when the same government is responsible for railroad operation everywhere. The annual bill for the construction of public buildings for the federal government has acquired the popular name of "pork-barrel" because it is so universally recognized that appropriations for this purpose are made to gratify local sentiment and to promote the interests of individual congressmen more than upon the merits of the matter, as determined by careful inquiry. What possibility is there that the administration of a system of national railroads would be, or could be, carried on under our democratic government in any other spirit? And in what possible way could the general interest of the people of the United States, in the matter of transportation, be less well served? Furthermore, the political consequences of centering such power in Washington are beyond calculation. . . .

Our privately-owned railroads are themselves largely responsible for the strength of the popular feeling in the United States (in favor of government ownership). . . . No doubt, the rebate system, so long practiced, accounts for most of this feeling. Happily, by virtue of the Interstate Commerce Law and the creation of the Interstate Commerce Commission, that which was a nation-wide abuse has become a rare exception, and it will become more and more rare. In other words, without public ownership, but through public regulation, we have substantially secured equality of treatment at the hands of the railroads for every shipper, large or small, in whatever state he may be. . . .

It is hard to speak with moderation of the financial abuses connected with railroad management which have done so much to create and to strengthen the demand for the public ownership and operation of railroads. The public has seen railroads loaded with charges for the profit of individuals responsible for the conduct of the roads, charges which add permanently to the cost of transportation. Increases of value, largely created by the public, have been absorbed entirely for private benefit; and all of this has gone on upon so great a scale and for so

long a time as to have cost railroad management, to a great extent, but often unjustly, both the respect and the confidence of the people. It is a case where the innocent suffer with and for the guilty. If government regulation can successfully put an end to these evils no doubt private ownership and operation of railroads may long continue in the United States; but, if government regulation falls short of being as effective in these directions as it has fortunately been in the ending of rebates, the tendency toward government operation, despite all its difficulties and dangers, is not unlikely to grow, unchecked. If the railroads wish to escape public ownership they must consent to the public regulation, for the future, of the issue of stocks and bonds; and it is greatly to be hoped that instead of placing every imaginable difficulty in the way of such legislation, they will cordially cooperate to see that effective and fair legislation to prevent repetition of the abuses of the past is quickly made a part of the law of the land.

One further observation is legitimate in this connection. If not completely, still very largely, the actual management of railroads in this country has passed, and is constantly passing, out of the hands of financiers and into the hands of practical railroad men who are less and less affiliated with the stock market. It is reasonable, therefore, to hope that we are passing out of the old era into a better order of things. The practical question also arises whether it is not better now to "let the dead past bury its dead" and to turn with united and courageous front towards the better future. An attempt to uncover all of the past, and to try to do ideal justice now for wrongs that were committed long ago, is certain to be very costly to the country as a whole, as well as to the unhappy stockholders, who, without personal fault, find themselves involved in such a predicament. Mr. Evarts used to say that "there are vested wrongs as well as vested rights," which was a wise man's way of saying that some wrongs are so costly to undo that it is better to leave things as they are than turn over a new leaf.

There is one aspect of public ownership and operation which it seems to me legitimate to point out to the railroad employees who are so largely represented in our membership, and that is its probable effect upon wages. Railroads that are publicly owned have available for wages only such sums as are appropriated by law. The cost of living is so different in different

parts of the United States that this difference is substantially certain to be reflected in an average wage below that which the railroads can pay under private management. The agricultural interests of the country are enormous, and one of their greatest difficulties comes from the fact that agriculture cannot afford to pay as large wages as transportation and many other occupations pay now. This is, in fact, one great reason for the high cost of food products, that agriculture cannot command the labor that it needs in order to cultivate as it should, and to produce and to harvest larger crops. As long as railroads are privately owned, agriculture must take its chances; but, in this country, if railroads were publicly owned, the granges and other combinations of farmers would certainly be on the job to keep railroad wages as low as possible. They would have to be or could not work their farms at all. There is a rigidity about law that makes it difficult to change conditions once established; and it is equally hard, under the provisions of law, to take into consideration local qualifying conditions. Such considerations as these satisfy me that railroad employees are not only better off now, under the private administration of railroads than they would be likely to be under public administration, but also that under existing conditions they can hope for a betterment in pay and rules of service which it would be vastly harder to realize from a federal government constituted like ours.

THE RESULTS OF GOVERNMENT OWNERSHIP¹

In reply to your letter of April 29, asking my views as to the proposition of government ownership of industrial plants for manufacture of armor plate, nitrates or other munitions, for use either in time of peace or war, I have but one opinion to give you and this is based only upon study, observation and experience in this and many other parts of the globe.

In policy or in practice, government ownership in such matters of national internal economy, would be nothing short of deliberate and premeditated suicide of our commercial rights and prosperity. It is the first step towards commercial socialism, which

¹ By A. A. Blow, Consulting Engineer, Southern Minerals Company. Iron Trade Review. 58: 1273-4. June 8, 1916.

will destroy the energy, enterprise and initiative of a people, who, under a liberal form of government, have in two centuries transformed this country from a primitive wilderness to what is now the richest, the most productive, and the most envied nation in the world.

Only when industrial progress and improvement has ceased and when internal enterprise finds no further profit in invention and competition and when politics are purified into patriotism, can government paternalism and ownership be beneficial to its people. History shows us, in innumerable instances, that such a condition has never been a success and has never survived in any age for any period of time.

This is not at theory, it is a self-evident fact, which can be demonstrated by an examination of the existing countries of the world today. A liberal government of the people, by the people, and for the people, should give all its people equal chance, it should control them, but not dominate or compete with them. If it does it is autocratic, not democratic. The absence of government ownership and industrial interference has happily made America what it is and has given us the supremacy, as an industrial nation, which we now enjoy. In almost every country on earth, the prosperity of its people seems to be in reverse proportion to the extent to which they have adopted this Utopian delusion of government ownership and control of its industrial affairs.

All Europe is suffering, more or less, from government paternalism of different degrees of intensity. England has had little of it since the days of Charles I. France also threw off the Bourbon and Napoleonic yoke and has since become prosperous and powerful. Italy has prospered on the same lines, and is wise in encouraging the private development of her vast resources and loosening her autocratic hold on her property. If our politicians will only raise their eye above the horizon of their political aspirations and consider the object lessons given them in Australia and New Zealand, the force of these remarks will be more apparent. In Australia, for example, the plan of government ownership has been thoroughly tried out. What is the result?

Australia is almost as large as the entire United States. It exists under a lenient and liberal government, framed after our own constitution. Without the expense of providing an army

and navy for its own protection, it has been settled for more than 150 years, with the same race of people that settled the United States. The country is rich in many resources and occupies a position which entitles it, on account of its size, position and resources, to control the southern Pacific, and even the orient. It is absolutely independent in its form of government, so far as its industrial affairs are concerned and can make or enact any laws, it sees fit, for the best interest of the people, as is the case with every British colony since the time of our revolution. Furthermore, it is financially backed by the richest and most successful colonizing nation on earth, Great Britain, and within its own sphere of influence it has no modern nation with which to compete, in its manufacturing or commercial expansion.

But, with all these advantages, the population of the entire continent of Australia is not very much greater than was that of the United States in 1776, at the time of the revolutionary war. Its growth is so slow as to be practically negligible. The settlement of its millions of square miles is confined to a few hundred miles from the sea coast and the interior is practically unknown and entirely undeveloped. There is not a railroad across the continent from east to west, or from north to south. There is only one rolling mill, and not a modern ship building yard of any importance in the entire country. Only within the past year have steel rails been manufactured within its boundaries, although, there are abundant resources of coal and iron and other mineral resources ready and awaiting development. In the settlement of this country, there were no savage races to overcome, no Indian wars to fight, no complications with foreign countries, as we had with France, Spain and England. The climate varies from the tropical to the temperate, as it does in the American continent. The people are patriotic, progressive, well educated and energetic, but these energies being deadened by government restrictions and excessive labor legislation, they often migrate from Australia, rather than remain in it. As all other races but the Anglo-Saxon, or white races, are barred entirely, by the slogan of "White Australia," the increase in population of Australia has been slow indeed. Despite favorable natural conditions, Australia has not advanced, as other countries have in the past fifty years. Why is this? I state, without hesitancy, that the principal reason is government ownership. Here, the government owns every foot of railroad,

every dock or wharf in every seaport, every telephone pole, or telegraph line, and dominates with labor laws every factory or business utility of every nature.

Paternalism and a mild form of socialism, or labor control, throttles every industry. Even some large ranches from which vast wealth was secured in former years by sheep raising, which made Australia famous for its wool, have been, by legislative enactment, taken over by the government and divided "for closer settlement." As a manifest result of this condition, private enterprise is discouraged, no one will undertake to build a new railroad or develop a new district and even with a government more liberal and framed, as near as possible, like our own government, for the people, it can not, with the incubus of government ownership around its neck, induce capital either from its own country, or abroad, to develop its resources.

Happily, we have not at this time tried this disastrous experiment in our country and I trust we never will. If we do, I fear the results will be the same. I have no hesitancy, therefore, in giving you my opinion that government ownership, as applied to any commercial enterprise within the United States, is a mistaken and unwise policy, which will bring disaster upon our industries in proportion to the extent to which it is carried out; and we will not realize the mistake we have made, after our government enters into such competition with its own people, until it is too late to retrace our steps.

For the above and many other potent reasons, which space prevents my giving in this letter, I am very strongly opposed to the policy of government ownership and operation, either of armor plate plants, munition plants, water power development and nitrate plants, ship yards or any other industrial development, which interferes and competes with private enterprise of its people. It has been demonstrated again and again that such work can be done cheaper, more quickly and effectively by properly controlled corporations or individuals, than it can be done by the government. There is, therefore, no use in wasting the funds of the people and increasing the taxes for inadequate results. England, France, Belgium and even Germany have relied upon their Krupps, Creusots and other great armament plants to supply their armies and navies with munitions of war, as well as other nations and we can safely assume our ability to do the same.

THE EXTRAVAGANCE OF GOVERNMENT OWNERSHIP¹

Let us consider the contention made by those advocating government ownership that the cost of capital would be materially less than it is under private control. Undoubtedly there is some thing to be said in favor of this contention provided the issue of bonded indebtedness by a government does not become so large that its bonds do not sell readily. If we were to take over the railroads of the United States, what would be the cost to the government? In taking over railroads in Europe by governments, from 20 to 25 times the net earnings for a period of years has been considered a fair price for so doing. If a similar method were adopted in this country it would make the cost to the United States about fifteen billion dollars. I think no one will contend that the United States can issue indebtedness to that amount, or to any considerable part of it, without materially increasing the rate which it would be necessary to pay for the money; and I am not confident that it could be done in a reasonably short time without paying as high a rate as the bonded indebtedness and the net returns on stock averaged during the past year, which, if true, would seem to remove the possibility of a saving on account of a lower government rate than paid by corporations. Furthermore, if the government owned the railroads, there would be a loss of taxes amounting to about \$110,000,000 a year, this being a very considerable item in the revenues of most of the states.

In the past one of the strongest arguments in favor of government ownership has been that it would prevent discriminations between persons, places and communities; but under our present railroad laws I do not think that there is enough complaint on this score to warrant taking such action unless the other reasons for so doing are overwhelming. There are other considerations which relate to this subject. The pressure for results in privately owned corporations goads traffic managers to the highest state of activity and efficiency. If they do not get as good results as their rivals, they are not promoted, and, very frequently, are retired. When we turn to government

¹ By John W. Weeks, United States Senator from Massachusetts. *Railway Review*. 58: 202-3. February 5, 1916.

controlled railroads all this is changed. The taxpayer may be called on when the results are not satisfactory. Therefore there is no particular pressure for results, and it is the experience in all affairs of life that you do not get efficiency unless there is some pressure or some personal emolument resulting from it.

Any such system as the civil service applied to our railroads would be fatal. One of the distinct weaknesses of the civil service is that men cannot get a suitable reward for unusual activity or intelligent effort. Promotion comes to the mediocre as well as to the efficient, and nothing could be more subservient to the best results in the operation of railroads than the putting of mediocre men in positions of high executive responsibility.

Development and improvement of railroads are much more apt to result from competition than from monopoly. Generally speaking, there is a kind of stagnation and stupidity in governmental monopoly which would be impossible in the case of private control. For example, there were four different gauges used in building the steam railways of Australia, the result being that it has been necessary to transfer freight and passengers at the sub-division lines at a very large expense. It is proposed to change this, however, to one gauge, but it is estimated that it will cost practically 25 per cent of the original cost of the roads to correct this stupid action.

Before taking any such important step as the ownership and operation by the government of public utilities, we should carefully examine the experiences and results obtained by those who have already tried out the same operations. The Western Railroad of France was taken over by the French government in 1908, since which time the following results have been obtained: Within three years the number of employees has been increased 15 per cent. During that time the operating expenses increased from \$29,500,000 to 44,500,000, or 50 per cent. This increase—and it is an important point to consider—was largely due to the increased cost of labor. In 1908 wages were \$16,000,000. In 1912 they had increased to \$26,500,000, or an increase of 68 per cent, and the total expense, five years after the government had assumed control, had increased 68 per cent. In the meantime the gross earnings had increased only 12 per cent. In 1911 there were 5,290 more men than in 1908, which is also a significant result.

The Italian government resumed the operation of railroads in 1905. In the next three years the number of employees had increased from 97,000 to 137,000, and the average wage had increased from \$250 to \$287 annually. The average operating expense while these roads were under private management, from 1899 to 1905, was 67½ per cent; when under government operation, the expenses had risen to 82.6 per cent.

In 1911 the operating expenses of the Intercolonial Railway in Canada were 97.2 per cent of the gross receipts of this government-owned line, and the net earnings were less than \$200 per mile, while the net earnings of all Canadian railroads, including the Intercolonial, were \$2,272 per mile. All of the conditions relating to the territory in which the Intercolonial operates are better for successful operation than the other sections of Canada, and yet this property has cost the taxpayers of Canada \$343,000,000, or \$237,000 per mile, which includes cost of road, deficit from operation, and unearned interest at four per cent on the investment.

GOVERNMENT OWNERSHIP OF RAILROADS¹

The following letter appeared in some of the New York papers of recent date, signed by Frank Trumbull, chairman of the board of directors of the Chesapeake & Ohio:

May I call attention to an editorial in the New York American, of May 26, entitled "Shortest Road to Honest Government Is by Way of Public Ownership," in the hope of correcting some wrong impressions that might be gathered therefrom?

From the tenor of this editorial it is impossible not to conclude that government ownership and operation of railroads in Canada is a pronounced success. Since this is not true, it seems fitting that the facts about this situation should be stated.

The Canadian government has operated the Intercolonial for forty-seven years and the Prince Edward Island Railway for forty-three years. It has built and is now operating the National Transcontinental. The aggregate mileage of these government roads is 3,800. Not one of these systems earned its operating expenses for the fiscal year ended June 30, 1915. The combined operating deficit of the three was \$350,000.

For twenty-five years of the forty-seven aforementioned,

¹ By Frank Trumbull. *Railway Age Gazette*. 60: 1325-6. June 16, 1916.

the expenses of the Intercolonial exceeded its earnings, the aggregate operating deficit being \$11,500,000. For twenty-two years its earnings were greater than its expenses, the gain being \$1,967,000. The net deficit from operation for the whole period of forty-seven years is, therefore, \$9,500,000.

During every one of the forty-three years of its operation by the government, the Prince Edward Island's operating expenses exceeded its earnings, resulting in a total operating deficit of \$3,280,000. Together with the net loss on the Intercolonial, aforementioned, the deficit of the two Government roads is \$12,800,000.

In 1914 both roads lost \$445,000, the joint difference between operating expenses and earnings; and, as previously stated, these roads showed expenses heavier than earnings for the fiscal year 1915.

With such losses confronting the taxpayers of Canada, it is pertinent to mention that these government railroads do not pay taxes. Last year Canada's privately-owned railroads paid the public in taxes \$3,049,728.

Apropos of "honesty" under government railroad ownership and operation, the building of Canada's latest acquisition, the National Transcontinental Railway, has led to a scandal. The cost of this road was estimated originally at \$34,083 a mile; it has actually cost \$99,000 a mile!

In 1914 a government commission on this operation said that there had been gross mismanagement, extravagance, and waste in connection therewith running into many millions of dollars, and the Grand Trunk Pacific, because of the enormous expense of this line, declined to lease and operate it at a rental of 3 per cent of its cost.

Work on the National Transcontinental was directed and supervised by four government commissioners. The commission subsequently appointed to investigate the whole transaction reported that "\$40,000,000 was needlessly wasted"; and that the cost of the National Transcontinental, for principal and interest up to 1921, will amount to \$234,651,252.

Speaking of the work of the government's commissioners who directed the road's construction, this investigating commission says:

"Having decided upon a design, the commission proceeded to find a country to fit the design. It may seem incredible, but it is the fact that it was assumed that the road would at once

receive the maximum business it was possible to earn with a single track. That there was an entire lack of business along the line does not seem to have occurred to them . . . and in our opinion the interest payable to the government and the operating expenses taken together will be about the same as the dividends, interest charges, and operating expenses of the competing roads (privately owned railroads), *which are only capitalized at from one-third to one-half as much per mile as is the National Transcontinental.*"

Continuing, the report says that contracts were not let to the lowest bidders; that contractors were overpaid \$3,300,000 on improper classifications; that certain contractors were paid two prices for one handling of material; that the chairman of the commission paid one man \$7,950, on a pretended damage claim, for election activity; that money was spent improperly on unnecessary fences, on unsuitable rails, on the building of unauthorized shops and of double track, in violation of the statute which called for single track.

The report further condemned the premature construction of the New Brunswick section of the railway, pointing out that if one-third of that cost had been expended on the Intercolonial, all the trunk-line facilities necessary for the Province of New Brunswick for many years would have been provided.

It may interest your readers to know that the Montreal Gazette once commented upon these roads thus:

There are not in North America anything like the records the government made last year in connection with the Intercolonial and Prince Edward Island Railways. These records were made, too, after the properties had been for eight years under control of the present ministers, and after tens of millions had been spent in improving and strengthening the roads for carrying traffic at a loss. It does not seem that incompetence alone, even of the worst kind, can account for such a shameful and threateningly ruinous state of affairs.

In view of these established and indisputable records, "the people, in their organized capacity, through their government" (to quote the American's own words), do not seem to have surpassed, nor, indeed, to have equalled, "the haphazard, disorganized" effort of the individual railroad owner in Canada, whose lines are operated at a profit. Furthermore, these records do not warrant the American's conclusion: "The shortest road to honest government is by way of public ownership of the public-service corporations."

A major cause of the poor showing made by the Inter-colonial has been the influence of politics. The part which politics formerly played is freely admitted by the officers of the road, although they say that conditions are somewhat different now. "Almost every abuse known to railroading," says the Canadian newspaper aforementioned, "took root and flourished, such as under-billing—that is, permitting a favored shipper to load the cars with a larger quantity of goods than he paid for, while his competitors on the other side of politics were restricted to a standard load, and mulcted for any excess, the granting of secret rebates; the maintenance of an excessive number of stations and employees in order to swell the political influences of the road at election times; absurd classifications; unjust tariffs; the acquisition of more or less useless branch lines to serve partisan ends, and so on.

Statistics relative to public ownership of railroads in Australia and New Zealand, of which the American made passing mention, prove that the system is similarly unprofitable and unserviceable. And, indeed, this result must ever follow under a system which capitalizes all its errors and omits the strongest incentive to improvement—the hazard of the private builder, who know that in error lies loss and probable bankruptcy, and who, accordingly, strives for economy, efficiency and real service.

"While private individuals perform a public function, they will constantly resist public regulation," said the American. Surely it could not mean this for the railroads of this country. Regulated by Congress and one federal commission, and by forty-eight state legislatures and their respective state railroad commissions, our carriers, today, are over-regulated, if not strangled, by an uncoordinated, conflicting, illogical and un-businesslike system of supervision. It is not regulation, but forty-nine masters, that are proving too much for the railroads, whose strength, after all, is limited.

Far from resisting regulation, all the railroads of the country are in favor of regulation; but they ask that regulation be sane and consistent. The inquiry proposed by the Newlands resolution, now before Congress, would give every citizen an opportunity to be heard on this vital question, and, perhaps, lead to a sensible, consistent policy of railroad supervision.

GERMAN CRITICISM OF STATE RAILWAY MANAGEMENT¹

Germany's state railroad system is an oppressive monopoly and a political mistake. Recently this view was expressed of three different industrial congresses, and in one case the indictment was backed by a two-thirds majority. This revolt against railroad nationalization comes just at the time when some Americans and Englishmen have begun to see in nationalization an easy, infallible way out of all railroad troubles. What aggravates the indictment is that it is mainly directed against the Prussian state system, which, of all railroad systems in Germany, is the most flourishing and efficient.

Every charge that is customarily leveled against corporation railroad ownership is now being leveled against the Prussian state system. The main charge is that the Prussian system makes for monopoly and restraint of trade. In committing—say critics—all the offenses which private corporations commit, the state knows no fear, for against it the public is doubly helpless, and there are no competing roads which can be used to bring the extortionate state to reason. Prof. Walther Lotz, one of the best authorities on railroad management, has just published a book on "German Communications Since 1800," in which he attacks the popular notion that state ownership prevents monopoly. German experience shows the contrary.

Not a Solution of Monopoly Problem

"Nationalization," writes Lotz, "is not by any means a solution of the monopoly trouble. Monopoly remains monopoly even if it is managed by officials. True, the state is claimed by nationalization enthusiasts to be a higher and unerring entity. But in reality the state is only the national organ of erring men, who are influenced by their virtues, their faults, their interests and their passions. And these influences are all brought to bear on railroad management quite as much when the state does the managing as when private persons do it. Indeed, in countries governed on party principles, privately owned railroads are often more bearable than state-owned railroads, as state-

¹ Berlin correspondent in the Springfield (Mass.) Republican. Reprinted in Railway Age Gazette. 57: 327-8. August 21, 1914.

owned railroads are exploited as much as possible for their own advantage by changing parties." And referring to plans of railroad nationalization in foreign countries, Prof. Lotz adds: "This is a reason against nationalizing the railroads in the United States."

What is just now being said against German railroads mostly applies to Prussia. "German" railroads, owned by the federal government, on the lines discussed in the United States, do not exist, except in Alsace-Lorraine. The system is railroads owned by individual states. The Prussian state, or strictly, the organization known as the "Prussian-Hessian railroad community" is the biggest owner, for it possesses 38,000 kilometers out of the 62,000 in the whole empire. Bismark aimed at nationalizing railroads on federal lines, but his bill enacting this was defeated owing to opposition by the middle-German and south-German states. At present the only bond between the different state-owned systems is article 42 of the constitution which obliges the states to manage their roads in the general interest of the empire.

Many think that this splitting up is the cause of the defects of German railroad nationalization. Instead of being controlled by the democratic imperial legislature in the general interest, the roads are controlled by the state governments and state legislatures which nearly everywhere are on a reactionary and class basis. This is particularly the case with the "Prussian-Hessian railroad community." The Prussian government is narrowly conservative and agrarian. The Prussian Diet, elected on a narrow, property franchise, is the same. Prussian government and Diet policy is agrarian. It aims at sparing the landowners in matters of taxation, at encouraging the export of grain which is practically bounty fed; and also at encouraging export by the "Schwerindustrie," an ally of the agrarians, which controls, on trust principles, the production of coal and iron. The interests of the small trader and consumer are neglected. Prussia's railroads are governed in accord with this policy. She has low rates to favor the grain producer and the iron exporter; and high rates which hit the consumer on important products.

Railways Used as Government Milch Cow

A greater objection to Prussia's railroad system is that it uses its monopoly to accumulate vast funds for the state finances.

This is considered a breach of sound railroad management and is a violation of a promise. Thirty years ago, during the era of railroad nationalizing, Prussia's minister of public works promised the Diet that the railroads would be run entirely in the interests of those using them, and not in order to make profits. "State railroads," he said, "are not a milch cow; they are not intended to be a source of state revenue."

He later promised that the railroad rates imposed would be only high enough to cover transport and maintenance and to pay a moderate percentage on the purchase debt incurred by the state. A similar promise was made in England in regard to the postal services, which were also not intended to help the state finances. Experience shows that governments are never able to keep such promises. The moment state finances run dry the state trading departments are resorted to as milch cows. Just as the English postal services are bringing in \$25,000,000 a year to help the state finances, so the Prussian railroads are bringing in over \$200,000,000 clear profit. This vast profit is 36 per cent of the gross earnings, a proportion probably reached by no other railroad system in the world.

Large Earnings from Excessive Rates

Germans, who resent this system of exploiting railroads for gain, are not consoled by the fact that \$200,000,000 goes into the state, not into private, pockets. They object that the \$200,000,000 is not equably imposed as a tax on all classes according to wealth. It is taken mainly from the non-privileged classes, on whose traffic the railroad administration imposes heavy transport rates, while the roads carry the landowner's corn and the iron magnate's metal at very low rates, or even, as is suspected, at a loss.

The account books of the "Prussian-Hessian railroad community" for the past 30 years reveal how the state railroads have acted as milch cow for the state treasury. Between 1882 and 1912 over \$1,250,000,000 has been taken out of the railroad profits and handed over to balance the state budget. This transaction is made possible by the fact that the \$200,000,000 annual profit is far more than is needed to pay interest on and amortize the railroad debt. The profits amount to about 7¾ per cent on the railroad debt. But the railroad debt was borrowed at about 3½ per cent. Of the original railroad debt of

\$2,875,000,000, \$1,085,000,000 is consols, of which nearly all bear $3\frac{1}{2}$ per cent, but a small portion, 4. The state with its $7\frac{3}{8}$ per cent from the railroads makes on this money a clear profit of nearly 4 per cent. The rest of the capital comes out of the "railroad extraordinary fund" and the "disposition fund," against which no interest-bearing consols are issued; and on this portion the state puts in its pocket the whole of the $7\frac{3}{8}$ per cent earned.

In the matter of profits the state's appetite grows. Twenty years ago it was content with $5\frac{1}{2}$ per cent, which put a clear 2 per cent in its pocket. When this caused objections, the government pleaded that, owing to the bad condition of the state finances, it could not do without the 2 per cent; but it promised faithfully that the milch cow process should go no further. If profits, it said, showed signs of rising still further, they should be cut down by means of a general rate reduction. Despite this promise, profits were allowed to rise by yet another 2 per cent on the capital invested; and the rates remained practically as before. This enormous profit did not result from management efficiency. Judged by American standards the management is not efficient. The ratio of expenses to receipts has steadily risen. The profit is due entirely to the vastly increased traffic, the carried freight being about $2\frac{1}{2}$ times greater than it was 20 years ago.

In addition to subsidizing out of railroads the ill-balanced state finances, Prussia has created from the same source a vast state property. This is shown by the railroad capital account. The railroad administration has written off an excessive amount of the original small capital outlay of \$2,875,000,000. Altogether \$750,000,000 has been amortized. So that of the original railroad debt only \$2,125,000,000 remains outstanding. This judged by European values, is a ridiculously small capitalization for 38,000 kilometers, nearly all double, treble, or even quadruple tracked, and splendidly equipped. As a fact, the present sale value of the state railroad system is appraised at \$5,200,000,000. The increase in value is due to the putting back into the roads of part of the profits; to extension built out of profits; and to the natural rise in land and other values. The difference between the outstanding capital debt of two billion dollars odd and the present value of five billion dollars is the profit and property of the state.

High Rates a Tax on Business

If the state were a private corporation it might point with pride to this result of 30 years' ownership, but the public would complain and threaten, and ask why a railroad earning 7½ per cent and in addition creating out of profits capital values of three billion dollars did not reduce its rates? That is the complaint in Prussia. The state, say the complainants, should cut rates heavily; it should be content with the 3½ per cent which it itself must pay to borrow capital for railroad construction; and if its finances suffer, then let it mend them by imposing property taxes. The high railroad rates tax, not property, but business; and they tax heaviest the business which can stand it least.

The complaint is reinforced by the charge that the roads are not efficiently managed. Reichstag Member Gohre said that the state might cut rates heavily and still pocket its 7¾ per cent if only it economized in management. Herr Gohre further showed that the roads are badly overofficialized. In the Cologne chamber of commerce it was stated last year that, counting passengers and train ton carried, the Prussian roads have 2½ times as many officials as the American roads; and that they have five times as many clerical and other officials who do no physical work. "The bureaucratic management and the excessive staff would not," the speaker said, "be tolerated by a private corporation."

Rates not Adapted to Commerce

Most persistent of complaints is that the rates are fixed by bureaucrats who do not understand business; and are taught by their superiors that the rates should favor grain and iron exporters at the expense of other interests. Bismarck had a plan for letting the Diet fix the rates. This plan was not carried out. The rates are fixed by a nominated railroad council of state officials.

This railroad council invites the cooperation of representatives of the business interests; but the representatives are only advisers and have no decisive vote. The interests, however, bring sufficient pressure to push their points against non-represented interests. The chief of the railroads, Minister of Public Works, Breitenbach, ascribes to this the high rates. He says that the interests themselves, in their zeal against competition, have prevented a reduction. Minister Thielen, a predecessor,

said the same thing. He described the roads as "a morsel between contending dogs for which there is no parallel even in America, where the trusts exploit the roads in their own interests."

Critics emphasize this weak side of railroad nationalization. They say that where roads are privately owned the rates are invariably controlled by some public authority, and this public authority is in turn controlled by the legislature, whereas in Germany the vital matter of rates is withdrawn from the legislature and handled by a handful of uncontrolled bureaucrats.

SWITZERLAND'S RAILWAY SUCCESS¹

We subscribe to no such dogma as the "impossibility" or "absurdity" of government ownership or management of public utilities. It is all a question of expediency—a question, to be sure, turning often on extremely broad and deep considerations, and not merely on the immediate facts of a given case, but still a question of expediency. It is fair to acknowledge, and to take for what it is worth, such an experience as that of Switzerland, especially as Switzerland is a democratic republic. But before we jump to conclusions regarding our own country, we must look certain large and vital facts in the face. Of these, the most obvious relates to the mere geography and history of the country. The United States is a vast new country, whose area—we speak of the contiguous territory, not counting Alaska, or the insular possessions—is 3,000,000 square miles; Switzerland is an ancient and fully settled country, with an area of 16,000 square miles. Texas alone could swallow up sixteen Switzerlands, and the population of Texas is barely more than that of Switzerland. It would take nine Switzerlands to make a Montana, but the people of Montana are only one-tenth as many as those of Switzerland. Evidently, the problem of reconciling the demands of the present, and of weighing the needs of the future, for this vast continental area, filled with a restless, energetic and rapidly growing population and big with mighty changes almost from year to year, is not to be compared with that presented by the transportation problems of the compact and ancient little mountain republic of Europe.

¹ Nation. 94: 255-6. March 14, 1912.

Hardly less important than this, if less important at all, is the consideration of the nature, the temper, and the traditions of the people. Now anything more unlike the American temperament than that of the Swiss people it would be difficult to find. And it is hard to say whether this difference is more pronounced if we consider as American that which was the recognized American type of the earlier generations of our republic, or that wonderful cosmopolitan mixture which now plays so large a part in the development of our social and economic problems. Take it as you will, and you have here a tense, nervous, high-strung people, keenly ambitious and eager for quick "results," as against a nation which, whether in the country or the city, is essentially a nation of sturdy yeomen. It is needless to expatiate on this idea; anybody can supply a score of particulars to reinforce the contrast. Rather let us take, as a slight illustration, the plain tale told by the writer of the *Quarterly Journal* article, narrating the history of the addition made to the standard wage scale on account of the rise in the cost of living:

The highest rates of wages in effect upon the private railways (which were the basis of the governmental rates) had been established in 1896 and the rise in the cost of living since then amounted to over 27 per cent. The men began to complain respectfully, but during 1906 with increasing vigor. The government, when confronted by the men with family budgets and other pertinent evidence of the fall in real wages, recognized the justice of their claims, but wished to postpone the revision of their wages until a general act could be prepared that would apply to all federal employees. . . . The federal council ultimately recommended that each married employee and each unmarried employee with persons dependent upon him for support, earning less than 4,000 francs a year, should receive a supplement to his annual earnings of 100 francs (\$20); and that all other employees earning less than 4,000 francs should receive 50 francs (\$10). The federal council took pains in its message to the assembly to remark on the courteous tone of the employees' petitions and the reasonableness of their request.

Can any one imagine such a story told of a like situation in the United States? And is it not equally impossible—going back to the other phase of the matter—to imagine any mechanism of official management which would eliminate here, as seems to have been done in Switzerland, the pressure of personal and local interests, in the face of the overwhelming importance of transportation questions in this country?

PUBLIC OWNERSHIP IN FRANCE¹

If we take up the state railway system of France we find all these shortcomings on a still larger scale. Prior to 1875, there were no railways of this kind in France. The plan generally adopted in France has been a concession to a private company for a period of ninety-nine years. For some of these companies a little more than half of the concession has now expired, and for others nearly one-half. At the end of this period of ninety-nine years—that is, between 1950 and 1960 for the principal companies—the railways will revert to the state, which does not mean, however, that the state will have to take over their management. The state can then make a new concession on more advantageous terms for it and for the public, because if not all, at least the largest part of the capital used for the building of the roads will have been liquidated by the redemption, which the companies make every year, of a part of their shares and bonds. In France the state originally aided in the building of its railway system by moderate money subventions and by guaranteeing the payment of the interest on the capital used for the building of the secondary lines. The development of traffic and of net profits has generally made it unnecessary for the companies to have recourse to this plan of guaranteed interest, and the principal companies have already paid back, or will eventually be able to pay back, the sum advanced by the state for this purpose.

Thus, in the original plan of the French railway system the state took no part in the management. About the year 1875, circumstances threw into its hands a line which at first was not of very great importance; some small companies in the western part of France, between Bordeaux and Nantes, failed or got into financial difficulties, and the state, in order to preserve the shareholders from complete ruin, did what was not at all necessary—bought up the line belonging to these small companies, and instead of passing it on to a large and flourishing company decided to manage the line, at least provisionally. But this temporary arrangement finally became a permanent one, and gradually the line was lengthened until it reached Paris, so that there came to be in western France a line, linking the

¹ By Paul LeRoy Beaulieu. *North American Review*. 197: 295-311. March, 1913.

capital with Bordeaux and Nantes. This line, known as "the old state railway," is now about 3,000 kilometers in length, thus forming about a sixteenth part of the total length of the whole French railway system. The running of this road is very expensive. Its net revenues do not represent 2 per cent on the invested capital. It has had some terrible accidents of late, costing the lives of scores of passengers. The last one was due to the bad condition of a bridge over the Loire; the weakness of this bridge had been common report for a long time.

In 1908 the state added to its small system a much larger network of railways by taking over the important Western Company, which controlled the roads of Brittany, Normandy, and some neighboring departments, and which, starting at Paris, had as termini the seaports of Havre, Cherbourg, Brest and Nantes. This system embraces about 6,000 kilometers and brings up the total of the state roads to 9,000 kilometers, or nearly a fifth of the whole French system of railways.

For a long time the Radical party, which has been in power in France from 1898 to 1911, inclusive, has favored the policy of taking over the railways and having them managed by the state. This was one of the planks of the Radical platform as far back as 1889. The Conservative party, on the contrary, has always opposed this idea. The Ministers of Finance of the Third Republic, who have left the best names—M. Léon Say and M. Maurice Rouvier—always combated the proposal, whose financial and economic consequences they held would prove to be most disastrous. In 1908 the Clémenceau Cabinet, in which M. Caillaux was Minister of Finance and M. Barthou, Minister of Public Works, took over the management of the Western Company in the name of the state, notwithstanding the almost unanimous disapproval of the measure by the representatives of the region directly affected and the protests of nearly all of the French Chambers of Commerce. The bill was carried through the Chamber of Deputies without much trouble, but in the Senate it required a threat of a Cabinet crisis to obtain the small majority finally secured; and during the debate these ministers just mentioned repeatedly assured the recalcitrant senators that the transaction would cost the French Treasury nothing, that it would be an *opération blanche*, as the net receipts of the lines would cover the indemnity which had to be paid the company.

Now, the state began its management in January, 1909—that is, four years ago, long enough for us to draw some conclusions. And what is the result?

The state management of the Western Railway has been from the very start, and continues to be, a great financial and technical disappointment. For the first two years the whole line was in absolutely chaotic condition. The trains were never on time and the worst possible accidents were continually happening, whereas under the old management not a single passenger had been killed in ten years. After many experiments, the new management was forced to reduce the number of trains and cut down the speed of the principal ones. Today the technical side is better than it was at first, but not better than it was under the old company. The financial results, however, could not be much worse than they are, and are a great load on the state treasury.

In the year 1908, the one preceding the operation of the road by the state, the old Western Company had a net deficit of 27,000,000 francs, and consequently, in accordance with the plan then in force, the company borrowed from the state this sum with which to pay the interest on its bonds and shares. In 1909, the first year that the state had control of the roads, this deficit rose to 38,500,000 francs, and continued to rise as follows during the succeeding years: 1910, 58,500,000; 1911, 71,250,000; 1912, estimated, 84,500,000; and 1913, estimated, 90,000,000, in round numbers. While I am writing these lines M. Chéron, Deputy and a former Assistant Secretary, published a report on the subject in the name of the Budget Committee of the Chamber of Deputies. He belongs to the Radical party, but has to admit that the figures of the estimated deficit for the year 1913 are "very disquieting," and adds that the estimated deficit for 1912, as well as that for 1913, is largely attributable to salaries of the employees, the increase under this head being 52,000,000 francs since the state took over the road. M. Chéron declares that he is "not accusing anybody," doubtless because he knows it would do no good. He says he might be willing to accept an increase in salaries and wages, but points out that there is an excessive augmentation in the number of employees. Here are his exact words on this point: "As regards the increase of the personnel, it seems to me the administration has been rather

large. But the same thing is true of all the departments." And then he concludes with these words: "In this matter of the augmentation of the personnel, I understand it has reached the maximum." This reflection of an out-and-out Radical Deputy is very characteristic. In the government offices, at least in France, there is always a tendency to over-increase the number of the employed. But in this way more citizens are made happy, and the party in power fares better at the elections.

Thus, as we have seen, the trial of state ownership in France is directly against that system and consequently public opinion is now completely opposed thereto, especially enlightened, as it now is, by the financial and other shortcomings which have followed the state operation of the Western Railway. It may be regarded as certain that, notwithstanding the seventy socialist Deputies in the Chamber, it will be a good many years before another French Minister of Finance will venture to propose the state taking over another railway.

STATE RAILWAY OPERATION IN WESTERN AUSTRALIA¹

Few know the defects more to their sorrow than the western Australian railways. There, in that tiny system, rises the usual spectacle of a government railway commissioner charged with operation for the people, recognizing and owning publicly to these selfsame evils of state ownership, pointing the danger and fighting in vain to induce his own government to apply a remedy and check its headlong course toward financial ruin of its carriers. When two such policies come together—placation of a labor vote by greater payment of wages, placation of a larger vote by reducing rates, and thus the wherewithal to make the payments—financial stability is likely to suffer from the impact. In western Australia earnings for the fiscal year to June 30, 1913, for the first time in history exceeds £2,000,000 (\$9,740,000). A gain in gross of \$746,000, however, was offset by a rise in expense of \$791,000 over the year before. Interest paid on debt rose on the average from 3.46 to 3.52 per cent.

¹ By Francis A. Bonner. *Railway Age Gazette*. 56: 365-6. February 20, 1914.

Surplus fell in two years from \$1,090,000 to \$122,000; the net return on capital from 5.32 to 3.56 per cent. The margin between that 3.52 per cent interest paid on debt and this 3.56 per cent net with which to pay it measured on June 30, 1913, the western Australian railway's distance from bankruptcy.

Such a condition occasions little surprise after consideration of what this government system has done to curry favor of its voting passengers. Requests for increased facilities have arisen so frequently and are pressed so strongly, the department has erred so consistently on the side of liberality that the commissioner of railways cries loudly now for a halt. Passenger train mileage and reduced fares must be curtailed severely if ruin is to be avoided. So great has been the surplus of generosity, in fact, that nothing save a deficit is left for passenger traffic. Apportioning mixed train mileage and adding passenger train mileage, the earnings from fares represented for the last year \$1.05 per train mile. The cost of working was \$1.29 per train mile. In working cost alone there was thus a loss of 24 cents per train mile exclusive of 43 cents chargeable for interest! Despite an increase of population of nearly 50 per cent in ten years and increased weight, capacity and standards of equipment, the receipt per passenger train mile in 1912-13 was less than in the year 1902-3.

Much of the loss, it is true, arises from a steady decline in length of journeys with consequent loss in the average receipt per journey. But it rests also upon the effect of excursion fares now applying to a larger number of journeys on a greater number of days and over greater areas, while in company with repeated rate concessions in deference to demands of the public for increased facilities, passenger train mileage has arisen consistently, much of this addition being empty. "When these conditions are realized," says the commissioner, "it may well be seen that the department must rather look for openings to reduce passenger train mileage than to increase it, and for openings to increase fares rather than the reverse."

Unremunerative rates for freight service have arisen largely from a policy of "fostering infant industries" which the present management denounces as now useless to the industries and ruinous to the railway. Agriculture and coal mines have been the chief beneficiaries. Since 1907 fertilizer has been car-

ried at $\frac{1}{2}$ cent per ton-mile, a rate pronounced unparalleled in Australia (though by no means in the United States) for the purpose of encouraging the growing of wheat and development of new agricultural areas. The commodity, it was urged, would be carried in cars otherwise run empty to the country to return laden with wheat: the rate was necessary in order to induce more general use of fertilizers, increase the yield per acre and thus add to the railway revenue. This traffic has failed, however, to move as expected and the older farming districts now are pronounced well able to pay in full for the cost of service. Advance to the "miscellaneous" rate is demanded by the management, which would raise the charge to 2.4 cents per ton per mile.

Coal has been enjoying a rate of 30 cents per ton for the first 5 miles plus 1 cent per ton-mile thereafter. Denouncement of such a rate as excessively low is interesting when we contrast the rate of .47 cent per ton-mile on bituminous coal which is the average on United States railways. Yet for coal also an advance to the miscellaneous rate is demanded on the ground that this industry too is amply able now to stand upon its own feet.

Solely because of these profitable rates on fertilizer and coal and excessive payments for fuel, the government railways last year lost some \$371,000 which must come out of the tax-payer's pocket if the system is not to deteriorate. But to make matters still worse wages concessions cut ever larger slices from these depleted earnings. Nor has benefit ensued. "Improvement in conditions of employment," says the commissioner, "has not put an end to the demands made upon the department." In two years wages and salaries on these little railways have risen \$1,110,000. Salaried employees have gained an average of some \$35.00, wages staff some \$73 annually per man; gains which suggest significantly to say the least, the comparative numerical strength and organization of the workers affected. Why such expansion has been allowed to consume the meager substance of the railways is best told, by the commissioner himself:

The year under review has been one of continual pressure from the staff generally for increased remuneration and emoluments and it is with regret I have to refer again to the evil of political influence in this connection.

If such matters are taken in hand by members of parliament or of the government, acquiescence is thereby given to the action of those who have

approached them and the railway administration is powerless to do more than protest.

Unless the practice referred to is put down with a strong hand by those in whose power it lies to put it down that portion of the government railway act which was and is intended to remove the railways from political influence will become a dead letter. In any case it is a question of time alone when concessions so made to unreasonable demands from departmental employees are bound to result in revulsion of public opinion.

How has efficiency responded to the easy won concessions?

"It is with regret," says the railway chief, "that I have observed no general increase of energy or effort corresponding with such a large increase of expenditure."

And why should he expect to? Where neither the quality nor quantity of service nor any resultant of supply and demand in the labor market but merely the strength of numbers behind an appeal activates excessive concessions of the kind at the hands of a subservient master, what relation exists between wages and efficiency? Where it is not the justice of labor's plea but solely the force of combined voices which encompasses the desired end, where economic law is discarded and an idea fostered that the government is moved not by reason but by fear at the brandishing of organized labor's weapon of the strike, what relation remains in labor's mind betwixt zeal and compensation?

RAILWAYS IN NEW ZEALAND¹

Because of the general prosperity of the country, to which the railways have, of course, contributed, the gross revenue of the system has increased from £1,150,851 in 1895 to £2,761,938 in 1908. The revenue per mile of line has increased from £577 to £1,114, while the revenue per train-mile has increased from 85.75d to 93.75d. But the expenditure has increased in still greater proportion: the expenditure per mile of line from £367 to £796, the expenditure per train-mile from 63.62d to 70.59d. The gross earnings per train-mile exceed those of all the Australian railways except Victoria, and the expenditure per train-mile is greater than that of all of them, without exception. Had it not been for a fall in the rate of interest on government loans

¹ By James E. Rossignol and William D. Stewart. *Quarterly Journal of Economics*, 23: 652-96. August, 1909.

since 1895, from 4.1 per cent to 3.7 per cent, the deficit for 1907-1908, figured on the basis of the "capital cost" of the open lines, would have been, £184,352 instead of £89,349, as it now is.

The Railways Statement, presented annually to Parliament by the minister for railways, does not recognize the existence of a deficit, but shows a "net profit on working," so called, without noting that it is always insufficient to pay interest on the cost of construction at the average rate of interest paid by the government on the public debt. In the year ending March 31, 1908, the railways earned a "net profit" of 3.33 per cent on £24,365,647, the cost of construction of the open lines, but, since the average rate of interest paid on the public debt was about 3.7 per cent, the "net profit" is absorbed in interest payments, and a deficit emerges, amounting to £89,349, if interest is reckoned on the cost of the open lines only. But the real cost of construction of the railway system, on which interest should be reckoned, includes the cost of the unopened lines, making a total of £26,735,140, reducing the "net profit" to 3.04 per cent and increasing the deficit of £177,021. This is considerably less than the deficits during the administration of the commissioners, which, in their turn, were less than those of their predecessors, but as shown above, the reduction has been chiefly due to a fall in the rate of interest, with which the railway administration as such has had nothing to do. Reckoning interest on the cost of the open lines only, the total deficit from 1895 to 1908 amounts to £1,134,447; from 1882 to 1908 it is £4,256,025 (\$20,000,000). Taking interest on the cost of the unopened lines as well, the deficit is increased by at least 50 per cent.

Undoubtedly, wages and salaries have been slightly increased from time to time, to keep pace in a measure with the general increase in wages and cost of living in New Zealand and throughout the world, and this has caused an increase in expenditure, offset, however, by increased revenue, due to the general prosperity of the country. But such increases can hardly be regarded as voluntary "concessions," or gifts, since even now the railway employees, if one may believe the Amalgamated Society of Railway Servants, and their organ, the Railway Review, are receiving wages rather less than those paid in private employ, while their hours of labor are frequently much higher

than would be tolerated in any private business subject to the jurisdiction of the arbitration court. There are only thirty-one officials who receive salaries of £400 (\$2,000) or more. The general manager receives a salary of £1,250 (\$6,200) the chief engineer £900, the chief traffic manager £800, the traffic superintendent £650, the chief clerk £500. The most highly paid station master, a man who has been in the service for forty years, receives only £355 (\$1,720). Station masters receive from £170 (\$730) to £355, ordinary clerks from £170 to £300, cadets from £40 to £100, guards from 8s (\$2.00) to 10s (\$2.50) a day, enginemen from 10s 6d (\$2.25) to 12s (\$3) a day, firemen from 7s 6d (\$1.85) to 9s (\$2.25), carpenters from 9s to 10s 6d, blacksmiths from 10s to 12s, common laborers generally 7s (\$1.75) a day. Salaries and wages are now slightly higher than they were in 1907, but there is no evidence to show that any material concessions have been made to railway employees. However they have the advantage of regularity of employment and of retiring allowances under the superannuation system.

One of the most serious causes of inefficiency and dissatisfaction is the system of promotion. Men are usually promoted merely because their names come first on the list of seniority, unless it can be proved that they are actually incapable, which is difficult. The theoretical right to advance capable men over their seniors is practically never exercised, because of the unpleasantness and difficulty of proving alleged unfitness. Until a system of promotion by merit is introduced, there will never be an efficient service. Yet promotion by merit lends itself readily to favoritism and other abuses. Again, members of the service, even cadets, frequently have political influence back of them and this interferes seriously with discipline. Also workers in the government shops have frequently been accused of practicing the "government stroke." The general manager himself, Mr. T. Ronayne, recently wrote a strong letter to the chief mechanical engineer at the Addington workshops, making serious charges of inefficiency. However, when the commission appointed to investigate the charges met at Christchurch on March 11, 1909, the general manager said that he had been misinformed and that he was perfectly satisfied with the condition of the workshops. Yet in the course of the investigation certain significant facts were brought out, such as the difficulty of get-

ting rid of inefficient men, the difficulty of getting good men when needed, the lack of encouragement to inventors and other good men by promotion and advances in salary, and the lack of up to date appliances in certain lines of works.

The financial failure of the railways has been one of the chief causes of the slow growth of railways during the past thirty years. From 1873 to 1878 nearly 1,000 miles of line were built, an average of about 200 miles a year; but in the thirty years from 1878 to 1908 only 1,385 miles were built, an average of only 45 miles a year. This average would be fairly high if the railway system were practically complete and only a few minor extensions had to be made from time to time. But such is not the case. A section of the main trunk line between Auckland and Wellington, about 200 miles in length, has taken twenty-three years to build, altho it was the most important link in the whole system, and promised to develop a large and profitable traffic. "Apart from the fact that this dilatory method of construction has added enormously to the cost, it is appalling to think of the huge sum which the Dominion has paid in interest during construction, to say nothing of the returns which might have been gathered in and the settlement which would have been promoted, had the work been completed with reasonable dispatch.

The causes of this delay and loss have been chiefly two. In the first place, the funds available for railway construction have been distributed, not to say frittered away, in various parts of the country, in the building of small bits of line, instead of being concentrated on one or two important works. This was largely due to political considerations. Secondly, the funds at the disposal of the government were limited, because the government could not advantageously borrow more than a certain amount every year, altho much larger sums were urgently required. If the railway already built had been paying investments, earning the full interest on the capital cost, and perhaps, a surplus to apply to betterments, a considerable sum now borrowed for "additions to open lines" would have been available for new construction, and it would have been easy to borrow all the money needed for projected lines if only they promised, in their turn, to become paying investments. Thus the districts already supplied with railways, by their narrow and selfish